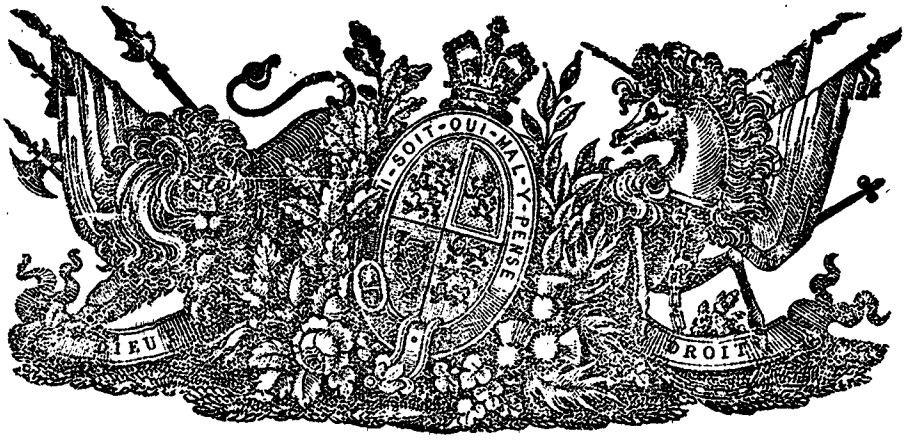

ADMINISTRATION REPORT OF CIVIL WORKS

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OF THE

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PUBLIC WORKS DEPARTMENT,

(GENERAL BRANCH),

BOMBAY PRESIDENCY,

FOR THE YEAR

1893-94.

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ADMINISTRATION REPORT OF CIVIL WORKS

OF THE

PUBLIC WORKS DEPARTMENT,

FOR THE YEAR 1893-94.

GENERAL REMARKS.

The total expenditure of the year on Civil Works was Rs. 53,22,665, as below :—

			Rs.	Rs.
Outlay in India.				
Imperial		...	3,87,136	
Suspense		...	−58	
				3,87,078
Provincial...		...	33,51,154	
Suspense		...	9,206	
				33,60,360
Contributions.	Provincial	...	67,723	
	Excluded Local Funds ...	...	2,85,889	
				3,53,612
Incorporated Local Funds ...		...		12,16,118
				53,17,168
Add—				
Outlay in England ...	...	3,332		
Loss by Exchange ...	...	2,165		
				5,497
	Grand Total ...			53,22,665

In round figures the expenditure on New Works was a little more than Rs. 21$\frac{3}{10}$ lákhs ; on Repairs about 19$\frac{1}{2}$ lákhs ; on Establishment a little more than 11$\frac{1}{2}$ lákhs; and on Tools and Plant about $\frac{4}{5}$ lákh.

2. Under *Imperial Services* the outlay of the year has been principally on works required by the Salt Department, and steady progress was made in meeting the most urgent of those wants in the matter of providing roads, custom-houses and nákas, quarters for establishment, and water-supply. Of these the most important was the construction of offices and quarters for the Customs and Salt Departments, a bungalow for the Assistant Collector and quarters for police guards, and a shed, platform and sidings, at Castle Rock, a station on the Southern Marátha Railway, estimated to cost Rs. 1,73,289, all of which, with the exception of the Assistant Collector's bungalow, &c., have been completed during the year.

3. The grant for the Somáli Coast works was Rs. 48,200 for works and repairs, and the principal works under the former head were Camel Savárs' lines at Dubár, and a Customs pier at Berbera.

4. Under *Provincial Services* the progress during the year has been briefly as follows:—

5. In the *Revenue* Department, the new offices for the Collector of Dhárwár were completed, and additions and alterations were completed or in progress to the Collectors' offices at Sholápur, Belgaum, Godhra, and Alibág, and to the Collector's bungalow or residence at Sukkur. Record accommodation was under provision at Poona, Sátára and Sukkur, and completed at Ratnágiri. One Mámlatdár's kacheri was completed, and five new ones were commenced and in progress, improvements at one were in progress, and quarters for kárkúns were under construction at another; three new Mahálkaris' kacheris were commenced, and special repairs were carried out to another. In Sind two Muktyárkarates were completed, and one nearly so, and additions and alterations were commenced at another, and nearly completed.

6. Under *Political* buildings the Court and Police Office for the Assistant Political Agent at Sádra has been completed; and quarters for the Assistant Residents at Steamer Point and Aden were commenced and half completed.

7. At the *Government Houses* at Bombay and Ganesh Khind improvements in water-supply, drainage and sanitation were commenced and completed during the year; and additional quarters for clerks were in progress at Mahábaleshvar.

8. Under *Distilleries*, a new distillery at Godhra, for the Broach and Panch Maháls Districts, was commenced late in the year; and additions and improvements to the already completed distilleries at Dhulia and Surat were in progress.

9. Under *Law and Justice* the adaptation of the Claremount premises at Byculla for the Courts of the 2nd and 4th Presidency Magistrates was completed; a new Subordinate Judge's Court at Kalyán, and also a building to provide accommodation for three Subordinate Judges' Courts and for the Small Causes Court at Poona were commenced; and additional accommodation for the Benches of Magistrates and Honorary Magistrates at Poona was completed.

10. Under *Ecclesiastical* buildings, a new church for Native Christians of the Church Missionary Society at Poona was erected from funds contributed by the Society; and a campanile or tower for the Church of the Holy Name, belonging to the Society of St. John the Evangelist, was commenced from funds provided by the Society. Quarters for the Chaplain of Christ Church, Byculla, were commenced; and a new cemetery was completed at Dhárwár, and water laid on to the cemetery at Karáchi.

11. Under *Jails*, in connection with the new Central Jail for Gujarát at Ahmedabad, the buildings have been virtually completed, and the water-supply and drainage nearly so; the new Central Jail for Sind at Hyderabad has been vigorously pushed on, and is expected to be ready for occupation by October 1894; a new Civil Jail at Hyderabad was commenced; and additions and improvements to the Dhárwár Jail were completed, and similar work was commenced and in progress at the District Jail at Bijápur.

12. For *Police* buildings, the budget-estimate for the year contained a provision of Rs. 1,83,300, of which Rs. 21,170 were for works in progress, and Rs. 1,62,130 for new major and minor works. The actual outlay is detailed in Appendix B, and an account of the principal works carried out will be found in its proper place in the report.

13. Under *Educational* (wholly Provincial), the low-lying ground to the south of the Elphinstone College at Bombay was filled in, and certain additional works were undertaken at the Elphinstone Middle School. At Ahmedabad, additions and alterations to the Mahálakshmi Female Training College were taken in hand. At Poona, at the Deccan College, minor improvements to the residence of the Principal were carried out, and quarters for 32 resident students commenced. A house was purchased for the residence of the Superintendent of the Workshops of the College of Science. In connection with high schools, additions and alterations to the Byramji Jijibhoy High School at Thána, and the High School at Nadiád were completed; a commencement was made with the Ráo Bahádur Govindrao Ramchandra High School at Dhulia; and at the High School at Hyderabad, a residence for the head master, and quarters for resident students, as well as a hall, to be designated the "Metharam Hall," to commemorate the name of the Native gentleman who contributed largely towards its cost, were in progress.

14. Of aided buildings, at Bombay, the out-buildings for the Anjuman-i-Islám School, and certain additions and improvements to the St. Peter's School at Mázgaon were completed; at Ahmedabad, materials were collected for the new Gujarát College building, to enable a commencement to be made next year; a school for girls at Meethganj Peth, Poona, for the Church of Scotland Zenana Mission, was commenced; also a convent school for girls at Igatpuri, which was practically completed by the end of the year. Numerous Local Fund school-houses were under construction or completed throughout the Presidency during the year.

15. Under *Medical* buildings, at Bombay, water fittings, a garden and sculleries were under provision to the St. George's Hospital; at the Jamsetji Jijibhoy Hospital, ward No. 1 was converted into an operating theatre; and additions and alterations were carried out to the Nursing Sisters' quarters, by which the accommodation has been greatly improved and amplified, from an amount raised by public subscriptions. At Poona, a large quarry in front of the Sassoon Hospital has been filled up, and an enclosure wall, with entrance

gates, constructed to the Hospital for Women and Children, erected by the Church of Scotland Mission. At Hyderabad a new Civil Hospital and Medical School was commenced. Additions and alterations to the new European General Hospital at Aden were commenced and about half finished. Additions to the Civil Hospitals at Sátára and Kaira were in progress. Local Funds dispensaries were completed or in progress at various stations in the Presidency.

16. Under *Miscellaneous* buildings at Bombay, a wing to the south of the west end of the Public Works building was commenced, and additional iron record racks, for the use of the Accountant General's office, were under provision in the General Record-room.

17. The gross outlay on original works under *Communications*, from Provincial and Local Funds and contributions, amounted to Rs. 4⅘ lákhs during the year. This amount has been principally spent on the completion or continuation and commencement of new communications, the improving and metalling of existing roads, and in the construction of various bridges, details of which will found in the report.

18. Under the head *Miscellaneous Public Improvements*, the gross outlay on original works has been a little more than 2½ lákhs, principally on account of water-supply works undertaken on behalf of Municipalities, of which the most important in progress were the Dhulia water-supply works, the revised estimate for which amounts to Rs. 4,16,899 ; the Hubli water-supply works, the revised estimate for which amounts to Rs. 4,78,770, of which a portion will be borne by the Southern Marátha Railway Company, and the Panvel water works, the estimate for which amounts to Rs. 1,10,831. Amongst projects for water-supply, which have been prepared, is the Dhárwár water-supply scheme, the sanctioned estimate for which amounts to Rs. 4,58,977 ; and projects are under investigation for the towns of Surat, Dákor, Ahmednagar, Yeola, Násik and Bijápur. The drainage of a portion of the city of Ahmedabad, as designed by Mr. Baldwin Latham, C.E., is in progress. One-third was carried out in 1891-92 and 1892-93, and the experiment having proved successful, it is now proposed to carry out the remaining two-thirds.

19. The actual cost of *Establishments* of all classes in 1893-94 was Rs. 19,26,203, as compared with—

Rs.
18,18,828 in 1892-93,
17,59,349 in 1891-92,
and
17,84,016 in 1890-91.

20. The following table shows the distribution of the charges in each year :—

Head of Service.	1890-91.	1891-92.	1892-93.	1893-94.
Imperial.	Rs.	Rs.	Rs.	Rs.
Military	35,454	39,930	29,855	32,887
Barrack Department	9,675	10,024	9,923	10,469
Civil Works	40,130	50,268	47,313	52,388
Irrigation	5,78,865	5,67,763	6,17,415	7,26,819
Total, Imperial ...	6,64,124	6,67,985	7,04,506	8,22,563
Provincial.				
Civil Works	9,31,995	9,10,294	9,27,391	9,43,473
Irrigation	42,147	7,238	1,946	1,656
Total, Provincial ...	9,74,142	9,17,532	9,29,337	9,45,129
Local Funds.				
Incorporated	1,10,425	1,30,092	1,39,894	1,27,587
Excluded	35,325	43,740	45,091	30,924
Total, Local Funds ...	1,45,750	1,73,832	1,84,985	1,58,511
Grand Total ...	17,84,016	17,59,349	18,18,828	19,26,203

21. The total outlay, including suspense heads, under all heads, including Irrigation, was as follows :—

		Rs.	Rs.
Military	Works and Repairs ...	... 1,49,824	1,95,246
	Establishment ...	... 43,356	
	Tools and Plant ...	... 2,066	
Imperial, Provincial and Local Civil Works.	Works and Repairs...	... 40,87,410	53,19,333
	Establishment ...	... 11,54,372	
	Tools and Plant ...	... 77,551	
Irrigation	Works and Repairs...	... 24,42,128	32,03,118
	Establishment ...	... 7,28,475	
	Tools and Plant ...	... 32,515	
Expenditure on stores received from England		...	25,869
			87,43,566

Of this amount, Rs. 66,82,442, excluding suspense heads, were expended on works and repairs distributed as under :—

	Rs.
Military Works	... 1,50,116
Civil „	... 40,81,594
Irrigation „	... 24,50,731
Total	... 66,82,441

The total charge for Establishment being Rs. 19,26,203, as detailed in paragraph 20, gives a percentage of 28·82 on the actual outlay of Rs. 66,82,442, as compared with 28·8 per cent. in 1892-93.

Omitting Irrigation Establishment and outlay, which must be disregarded unless the revenue is also taken into account, also Barrack Department outlay, the comparison stands thus :—

	Rs.
Outlay on Works and Repairs ...	... 42,20,250
Cost of Establishment	... 11,87,259
Percentage	... 28·13

The percentage in 1892-93 was 26·5, and 22·4 in 1891-92.

22. For facility of comparison the following statement is given, showing the outlay on Works and Repairs by Executive Divisions during the year :—

Divisions.	Executive Charges.	Area in Square Miles.	Outlay on Works and Repairs, 1893-94.						
			Provincial.		Local.	Imperial.			
			Civil Works, including Contributions.	Irrigation.		Military, including Contributions.	Civil Works, including Contributions.	Irrigation, including Contributions.	Total.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Superintending Engineer, Northern Division.	Executive Engineer, Presidency	..	2,54,963	..	..	10,489	28,286	..	2,93,738
	Do. Ahmedabad (including Bhuj)	3,854	1,24,332	..	79,623	33,777	36,398	28,700	3,02,835
	Do. Surat and Broach ..	3,115	61,979	..	1,50,634	1,663	12,801	38,171	2,65,248
	Do. Kaira and Panch Mahâls.	3,570	45,657	..	1,22,646	5,559	4,262	556	1,78,680
	Do. Thâna	4,242	68,793	..	90,405	3,341	4,801	..	1,67,340
	Total ..	14,781	5,55,724	..	4,43,313	54,829	86,548	67,427	12,07,841
Chief Engineer, Central Division.	Executive Engineer, Poona District	5,347	2,78,512	..	47,424	16,053	13,256	..	3,55,245
	Do. Poona Irrigation		121	..	103	2,955	..	1,44,468	1,47,647
	Do. Nira Canal		..	..	1	..	..	1,21,291	1,21,292
	Do. Násik	5,940	62,288	..	63,190	..	1,416	11,040	1,37,934
	Do. Ahmednagar	6,666	73,076	..	67,558	44,459	243	6,846	1,92,181
	Do. Khándesh	11,987	1,34,651	..	1,87,514	3,634	2,423	..	3,28,222
	Do. Khándesh Irrigation .		..	..	541	..	..	35,399	35,940
	Do. Sholápur	4,521	57,589	..	39,942	97	924	30,224	1,28,776
	Total ..	34,461	6,06,237	..	4,06,273	67,198	18,262	3,49,268	14,47,238

Divisions.	Executive Charges.	Area in Square Miles.	Outlay on Works and Repairs, 1893-94. Provincial. Civil Works, including Contributions.	Provincial. Irrigation.	Local.	Imperial. Military, including Contributions.	Imperial. Civil Works, including Contributions.	Imperial. Irrigation, including Contributions.	Total.
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Superintending Engineer, Southern Division.	Executive Engineer, Sátára	4,987	1,82,708	..	70,419	26,848	906	37,662	3,18,543
	Do. Bijápur	5,757	57,599	..	55,052	..	266	2,484	1,15,401
	Do. Belgaum	4,656	1,11,813	1,37,043	73,347	71	19,053	13,305	3,54,632
	Do. Dhárwár	4,534	1,38,586	..	71,572	784	1,49,053	..	3,59,995
	Do. Dhárwár Irrigation		..	..	87,130	..	..	40,268	1,27,398
	Do. Kánara	3,910	1,20,925	..	17,788	..	7,381	..	1,46,094
	Do. Ratnágiri and Kolába	5,418	1,70,282	..	48,354	129	3,180	200	2,22,145
	Total	29,262	7,81,913	1,37,043	4,23,662	27,832	1,79,839	93,919	16,44,208
Indus Left Bank	Executive Engineer, Eastern Nára	3,500	28,484	..	1,713	..	375	2,23,738	2,54,310
	Do. Fuleli Canals	3,387	2,988	..	497	..	84	2,19,637	2,23,206
	Do. Hyderabad Buildings	5	2,41,694	..	4,579	..	1,009	..	2,47,282
	Do. Hyderabad Canals	5,660	27,214	..	4,955	..	178	1,60,213	1,92,560
	Total	..	3,00,380	..	11,744	..	1,646	6,03,588	9,17,358
Indus Right Bank.	Executive Engineer, Karáchi Canals	6,865	67,604	..	10,127	..	3,247	2,45,976	3,26,954
	Do. Ghár Canals	1,912	17,131	..	5,525	..	80	95,400	1,18,136
	Do. Western Nára	2,500	6,843	..	8,335	..	212	2,46,086	2,61,476
	Do. Begári Canals	2,514	6,763	..	4,523	..	427	2,51,422	2,63,135
	Do. Shikárpur Canals	5,424	48,342	..	8,537	..	676	3,55,458	4,13,013
	Total	31,767	1,46,683	..	37,047	..	4,642	11,94,342	13,82,714
Chief Engineer, Bombay Command, Military Works Department.	Executive Engineer, Aden	..	27,160	..	..	..	40,737	..	67,897
	Total	..	27,160		..	..	40,737	..	67,897
	Add—Outlay by Civil Officers	..	4,887	..	..	..	5,154	5,144	15,185
	Grand Total	..	24,22,984	1,37,043	13,22,039	1,49,359	3,36,828	23,13,688	66,82,441

23. Under the orders passed in Government Resolution No. 487 E.—2130, dated 22nd December 1891, the cost of Works Establishments by districts is shown in Appendix C., and the Chief and Superintending Engineers' letters explain the reasons why the percentages are lower in some districts than in others; the principal reasons being that when works are chiefly or largely executed by contracts, the expenditure on establishment and consequent percentages are lower, and that whereas in certain sub-divisions there is large concentrated expenditure, in others a small expenditure is scattered over a large area.

24. *Reorganisation scheme.*—The long expected scheme for the reorganisation of the Engineering Establishment of the Public Works Department was brought into operation during the year, the Government of India having, with the sanction of the Secretary of State, in September 1893, promulgated the rules and orders for regulating the organisation of the grades, the grade pay, and the promotion of Executive and Assistant Engineers, with the proviso that they were subject to revision at the end of seven years. The scheme came into effect from the 16th August 1893, and the changes effected in the Engineering Establishment of this Presidency, and its general financial results, will be seen from the following table :—

Rank and Grade.	Number of Engineers in each grade before the reorganisation (16th August 1893), including officers on leave. Actual Number.	Sanctioned Number.	Number of Engineers in each grade after the reorganisation (16th August 1893), including officers on leave. Actual Number.	Sanctioned Number.
Executive Engineers, 1st grade	12	12	19	19
Do. 2nd „	12	12	12	12
Do. 3rd „	13	13	8	8
Do. 4th „	5	5	...	...
	42	42	39	39
Assistant Engineers, 1st grade	28	33	16	16
Do. 2nd „	5	8	15	11
Do. 3rd „	5		7	12
Do. old „ „	...	...	3	...
	38	41	41	39

The comparative cost of the above is :—

	Actual Cost.	Sanctioned Cost.		Actual Cost.	Sanctioned Cost.
	Rs.	Rs.		Rs.	Rs.
12 Executive Engineers, 1st grade, at Rs. 950 per mensem ...	11,400	11,400	19 Executive Engineers, 1st grade, at Rs. 1,000 per mensem ...	19,000	19,000
12 Do. do. 2nd grade, at Rs. 800 per mensem ...	9,600	9,600	12 Do. do. 2nd grade, at Rs. 850 per mensem ...	10,200	10,200
13 Do. do. 3rd grade, at Rs. 700 per mensem ...	9,100	9,100	8 Do. do. 3rd grade, at Rs. 700 per mensem ...	5,600	5,600
5 Do. do. 4th grade, at Rs. 600 per mensem ...	3,000	3,000	16 Assistant Engineers, 1st grade, at Rs. 600 per mensem ...	9,600	9,600
28 Assistant Engineers, 1st grade, at Rs. 500 per mensem ...	14,000	16,500	15 Do. do. 2nd grade, at Rs. 500 per mensem ...	7,500	5,500
5 Do. do. 2nd grade, at Rs. 350 per mensem ...	1,750	1,400	7 Do. do. 3rd grade, at Rs. 350 per mensem ...	2,450	4,200
5 Do. do. 3rd grade, at Rs. 250 per mensem ...	1,250	1,000	3 Ungraded, old 3rd grade, at Rs. 250 per mensem ...	750	...
	50,100	52,000		55,100	54,100
Actual increase in cost of Engineering Establishment due to reorganisation	5,000	per mensem.	Difference between the old and new sanctioned scales 54,100 — 52,000 = 2,100.		
	55,100				

Comparison has been made in the above statement between the actual cost of the establishment of Executive and Assistant Engineers as it stood before and after the 16th August 1893, and shows an immediate actual increase of Rs. 5,000 a month, but this increase would have amounted to only Rs. 2,100 a month, had the numbers in the several grades accorded with the sanctioned scales at the time of the reorganisation.

25. *Retirement scheme.*—Following immediately on the promulgation of the reorganisation scheme, and with the object of removing the stagnation of promotion, which formed a long-standing subject of complaint, rules permitting the retirement, on special pensions, of certain officers of the Engineer Establishment who entered the Department of Public Works in the years 1874 to 1881, were published, and it was made known that a number not exceeding one-third of the total number of officers, on each of the several lists, eligible under the terms stated, and also not exceeding, in the aggregate, 110 men, would be allowed to retire. The terms were, however, not availed of by any of the officers eligible in this Presidency, and no applications for retirement have been received or forwarded by this Government, except in the single instance of an officer on Foreign Service, to whom the rules have been held not to apply.

26. The *Revenue* realised in the Public Works Department, as compared with the previous two years, was as follows :—

	1891-92.	1892-93.	1893-94.
Imperial.	Rs.	Rs.	Rs.
XXXI.—Military Works	21,155	21,791	24,079
XXIX.—Irrigation Major Works	4,43,997	5,21,046	5,14,581
XXV.—Irrigation Minor Works and Navigation ...	2,00,121	1,78,752	2,21,831
Provincial.			
XXXII.—Civil Works	7,48,249	7,99,954	8,41,015
XXX.—Irrigation Minor Works	16,897	17,475	30,646
Grand Total ...	14,30,419	15,39,018	16,32,152

27. The *Toll* revenues, including receipts under the Highway Act, in the three years were :—

	Rs.
1891-92	5,82,654
1892-93	6,36,051
1893-94	6,67,236

28. Details of the principal works in progress, or completed during the year, will be found under the several heads and sub-heads.

I.—CIVIL BUILDINGS.

I.—IMPERIAL SERVICES.

29. The expenditure under this head was Rs. 3,92,575, sub-divided as under:—

	Rs.
Original Works	2,63,539
Repairs	73,289
Establishment	52,388
Tools and Plant	3,417
Suspense	—58
	3,92,575

And the works carried out were as follows:—

3.—SALT.

30. Of the roads in connection with the Mátunga Salt Pans, described in previous reports, No. 3 was completed during the year, and the line of No. 4 having been altered, revised plans and estimates for a road from the Rowli Magazine to Salt Chowkey No. 35 at Mátunga, the latter amounting to Rs. 15,680, were prepared and sanctioned. This road is 4,550 feet long and 16 feet wide, and is similar in construction to the already completed roads Nos. 1, 2, and 3. The total estimated cost of the four roads is Rs. 60,043, and the total outlay incurred has been Rs. 53,602, of which Rs. 16,465 have been expended during the year. In the Surat Collectorate, quarters for Inspectors, with out-houses, at Bagváda and Namdha, on the Daman frontier, were in progress, the estimated cost of which is Rs. 13,256, and the outlay of the year Rs. 9,989. In the Ahmedabad Collectorate, the tank at Khárághoda, mentioned in the last report, having again filled, the work of puddling the dam was not continued, and as the leakage is diminishing, it is thought that no more puddling will be needed; a sum of Rs. 1,161 was, however, spent on repitching and improving the slopes of the main bund; the total outlay being Rs. 14,359, against the sanctioned estimate of Rs. 30,636. In order to serve the extension of the salt-works, the old line of water pipes was taken up and relaid, with an additional length of 1,600 feet, at a cost of Rs. 3,039. Alterations and additions to the salt sidings at Khárághoda were carried out during the year, by the Bombay, Baroda and Central India Railway Company, at a cost of Rs. 4,334, against the estimate of Rs. 5,043. In the Dhárwár Collectorate, at Castle Rock, a station on the Southern Marátha Railway, the work of constructing offices and quarters for the Customs and Salt Departments, commenced in the past year, and the sanctioned estimates for which amount to Rs. 60,229, was continued and completed during the year at a cost of Rs. 56,055, of which Rs. 46,046 were expended during the year. A shed, platform and sidings, estimated to cost Rs. 80,397, were under construction by the Railway Company, and Rs. 76,600 expended up to the close of the year. The Assistant Collector's bungalow, with out-houses and quarters for establishment and Police guards, were also commenced and nearly completed during the year, in which Rs. 24,915 were spent against the estimate of Rs. 32,663. In the Belgaum Collectorate, Inspectors' bungalows, with out-houses, at Kumkumbi and Talewadi, were commenced and nearly completed during the year, at an outlay of Rs. 7,088 and Rs. 7,843, respectively, against the sanctioned estimates of Rs. 7,690 for each; and an office for the Sir Kárkún at Talewadi was commenced and nearly completed during the year at a cost of Rs. 3,677. In the Kánara Collectorate, a bungalow, with out-houses, for the Salt Inspector at Diggi, sanctioned for Rs. 8,377, was commenced, and Rs. 4,742 expended during the year, on the collection of materials, &c.

5.—POST OFFICES.

31. At Poona, a separate building for Post Master's quarters has been constructed, and the old quarters, which were attached to the Post Office, have

been converted to provide additional office accommodation, at an outlay of Rs. 9,740, against the sanctioned estimate of Rs. 10,555. No other major work was carried out under this head during the current year.

SOMA'LI COAST WORKS.

32. The budget grant under this head for the year was Rs. 60,000 under all heads, and the principal original works carried out were as follows :—

33. Police.—The Camel Savárs' lines at Dubar, which were in progress in the past year, have been completed during the year at a cost of Rs. 11,370.

34. Administration.—The work of constructing a Residency and Court-house at Zaila was commenced, without authority, through a misunderstanding, and the foundations of the former and its out-houses excavated and filled in, and sheds for housing lime and other materials were put in hand. The work was stopped in January 1894, at which date the liabilities incurred amounted to Rs. 2,200, to cover which reappropriations of budget grants to that extent were proposed and sanctioned, and, so far as could be arranged, the materials collected were used on other works. The actual outlay incurred during the year was Rs. 2,018, and from the commencement Rs. 2,023.

35. Miscellaneous Public Improvements.—A Customs pier was commenced at Berbera. When completed, it will consist of a pier 560 feet long and 12 feet wide, with a T head, 32 feet by 12 feet. The depth at pier head will be at high water 9 feet, and 3 feet at low water. For a length of 523 feet the walls will be of dry rubble masonry with filling between, and thence to the pier head the walls will be built in Portland cement mortar; the foundations and part of the superstructure will consist of moulded blocks of Portland cement concrete. The rubble walling has been completed for a length of 500 feet, and the concrete blocks have nearly all been made. The outlay of the year has been Rs. 8,638, against the estimated cost of Rs. 32,690.

36. Boring for water in the vicinity of Dadab, in the Mandaha plain, was sanctioned in July last, and commenced at once. A boring, 60 feet in depth, was sunk near Dadab, the first 40 feet being through sand, necessitating the use of lining tubes, and the remainder through very hard conglomerate and rock, but no water was found; attempts were then made, by trial diggings, to follow up the underground course of the Labar Kabdli water in the direction of Dadab. The extreme rockiness of the soil made digging most difficult, and, so far, the course of the water has not been found. The outlay during the year was Rs. 4,516, against the estimated cost of Rs. 5,000.

II.—PROVINCIAL SERVICES.

37. The expenditure from Provincial and Local Funds, and contributions, including the outlay on Forest and Customs buildings, was Rs. 21,17,363, sub-divided as under :—

	Rs.
Original Works	11,34,742
Repairs	3,98,728
Establishment	5,51,976
Tools and Plant	31,917
	21,17,363

And the works carried out were as follows :—

12.—ADMINISTRATION.

38. Mámlatdárs' kacheris, on the standard plan, were commenced and in progress at Chikhli, in the Surat Collectorate, of which the estimated cost is Rs. 26,245, and on which Rs. 5,511 were spent; at Nevása in the Ahmednagar Collectorate, estimated to cost Rs. 36,218, and on which Rs. 7,479 were spent; at Sinnar, in the Násik Collectorate, estimated to cost Rs. 28,378, on which

Rs. 1,067 were spent; at Shirpur, in the Khándesh Collectorate, estimated to cost Rs. 32,371, and on which Rs. 6,688 were spent; at Dahiváda, in the Sátára Collectorate, on which Rs. 14,038 were spent, against the estimate of Rs. 30,586; and a defensive kacheri at Mátar, in the Kaira Collectorate, on which Rs. 6,946 were spent, against the estimate of Rs. 26,319. Improvements to the Mámlatdár's kacheri at Pen, in the Ratnágiri Collectorate, were in progress, and Rs. 4,761 expended against the estimate of Rs. 6,489. Quarters for Kárkúns of the Mámlatdár's kacheri at Kalvan, in the Násik Collectorate, were in progress, and Rs. 1,454 spent against the sanctioned estimate of Rs. 6,322; and the Mámlatdár's kacheri at Hubli, in the Dhárwár Collectorate, in progress during the past year, was completed during the year, at a total outlay of Rs. 29,148, against the sanctioned estimate of Rs. 29,367.

39. New Mahálkaris' kacheris were commenced and in progress at Hánsot in the Surat Collectorate, estimated to cost Rs. 14,751, on which Rs. 6,011 were spent; at Ghoda, in the Poona Collectorate, estimated to cost Rs. 19,106, on which Rs. 15,205 were spent; at Guhágar, in the Ratnagiri Collectorate, on which Rs. 7,514 were spent, against the estimate of Rs. 14,367; and special repairs, costing Rs. 2,629, were carried out to the existing kacheri at Paud, in the Poona Collectorate.

40. In Sind, the Mukhtyárkarate at Nausháhro, in the Hyderabad Collectorate, in progress from the past year, was completed at a cost of Rs. 20,392, against the estimate of Rs. 21,594, the outlay of the year being Rs. 1,864; a new Mukhtyárkarate was completed at Mirpur Khás, at a cost of Rs. 15,170, against the estimate of Rs. 17,074; and another at Kipra, in the Thar and Párkar District, was nearly completed, the outlay of the year being Rs. 17,534, against the estimate of Rs. 21,737; and additions and alterations to the Mukhtyárkarate at Sanghar, in the same district, estimated to cost Rs. 6,840, were commenced and nearly completed, the outlay to the close of the year being Rs. 5,811.

41. Record accommodation was under provision at Poona for the District Survey records, at an estimated cost of Rs. 15,242, of which Rs. 1,981 were spent during the year in the collection of materials; and a record-room for the Assistant Collector was completed at a cost of Rs. 2,849. A record-room for survey records at Sátára was put in hand, and Rs. 2,096 expended during the year. A general record-room for the Collector's kacheri at Ratnágiri, in progress in the past year, was completed during the year, at a total cost of Rs. 11,716, against the estimate of Rs. 11,857, and record stands provided at a cost of Rs. 4,329. A new record-room for the Collector's kacheri at Sukkur, in the Shikárpur Collectorate, was in progress, and Rs. 2,503 expended against the estimate of Rs. 4,249.

42. Additional office accommodation for the Collector at Godhra, estimated to cost Rs. 5,300, was commenced during the year, in which the outlay was Rs. 2,974. Additions and alterations to the Collector's kacheri at Sholápur were in progress, and Rs. 8,206 expended to the close of the year, against the estimate of Rs. 21,405. The work of adding an upper story to the Collector's record office at Belgaum, for the purpose of providing office accommodation for the Collector and his Assistants, was in progress, and Rs. 11,964 expended against the estimate of Rs. 25,682. New offices for the Collector of Dhárwár, commenced in 1891-92, were completed at a total outlay of Rs. 29,104, against the revised estimate of Rs. 31,662. Additions and alterations to the Collector's office at Alibág, in the Kolába Collectorate, were in progress, and Rs. 10,054 spent against the estimate of Rs. 19,750.

43. Additions and alterations to the Collector's bungalow at Sukkur, in the Shikárpur Collectorate, were completed at a cost of Rs. 16,554, and special repairs at a cost of Rs. 2,513.

44. A site was purchased for the proposed new Collectorate buildings at Lárkhána, in the Shikárpur Collectorate, at a cost of Rs. 8,565.

45. A new District bungalow at Hirekerur, in the Dhárwár Collectorate, was commenced and nearly completed at a cost of Rs. 4,950, against the estimate of Rs. 5,355.

46. Under Political buildings, the Court and Police office for the Assistant Political Agent, Mahi Kántha, at Sádra, commenced last year, have been completed, at a cost of Rs. 3,130, against the estimated cost of Rs. 3,425, from contributions; and the quarters for the Assistant Residents at Steamer Point and the Crater, Aden, alluded to in the last report, were taken in hand, and by the close of the year the main buildings were half, and the out-houses entirely completed. The total outlay has been Rs. 10,958, and that of the year Rs. 8,658. The amount of the revised estimate is Rs. 22,910.

47. In connection with Government Houses, the work of laying a new 6″ water pipe in the compound of the Government House at Malabár Point, Bombay, commenced in the past year, was completed during the year at a total cost of Rs. 3,390; and a storm water drain for the compound of the Government House at Parel was taken in hand and completed for Rs. 2,428; certain sanitary improvements to the premises of the Government House at Ganesh Khind were commenced and completed during the year, at a total outlay of Rs. 2,068; improvements to the Park Road, estimated to cost Rs. 4,560, commenced, and Rs. 1,984 expended up to the close of the year; and the roof covering of the stables improved by covering the corrugated iron sheeting with a layer of Mangalore tiles, at a total cost of Rs. 6,859.

48. Additional quarters for clerks of the Military and Private Secretaries at Mahábaleshvar were commenced during the year, and Rs. 2,735 expended, against the estimate of Rs. 2,904.

49. Under Distillery buildings, improvements to the drainage of the distillery at Surat, completed in the past year, were in progress at an estimated cost of Rs. 3,303, of which Rs. 917 were expended during the year; and a new distillery at Godhra, estimated to cost Rs. 71,616, for the supply of the Broach and Panch Mahals districts, was commenced late in the year, and nearly Rs 8,000 spent. Additional accommodation for the distillery at Dhulia, for the storage of mowra, was in progress, and Rs. 5,483 expended up to the close of the year, against the estimate of Rs. 6,420.

13.—MINOR DEPARTMENTS.

50. Under this head, the repairs to the Juma Masjid at Chámpáner, in the Kaira Collectorate, were in progress, and the balance of the grant expended on the domes; further progress has been deferred pending the inspection of the Superintendent, Archæological Survey, and more complete consideration of the subject. The total outlay has been Rs. 2,445, against the estimate of Rs. 2,792, and the outlay of the year Rs. 1,111. The Archæological buildings and remains at and near Ahmedabad have been kept in repair at a total outlay of Rs. 3,630. At Bijápur special repairs to the Gol Gumbaz were in progress, and the outlay to the end of the year amounted to Rs. 15,861, against the sanctioned estimate of Rs. 16,570, the outlay of the year being Rs. 2,499; special repairs to the Ibrahim Roza were completed during the year at an outlay of Rs. 3,323, against the estimate of Rs. 3,621; and Rs. 1,567 were spent on the conservation of other buildings. A small outlay was incurred in removing debris and dangerous parts of the temples at Balsana, in the Khándesh Collectorate, and an estimate for the necessary repairs prepared and submitted for sanction. Rs. 2,500 was paid as a grant-in-aid towards the general repair of the Juma Masjid at Tatta, in the Karáchi Collectorate, which was to be undertaken by the Mahomedan community.

51. A statement is appended to this report showing the actual expenditure on the preservation of buildings of historical and architectural interest from 1889-90 to 1893-94.

Appendix A.

14.—LAW AND JUSTICE.

52. At Bombay, the work of constructing record racks in the High Court building was proceeded with and completed at a total outlay of Rs. 5,167, against the estimate of Rs. 5,986, the outlay of the year being Rs. 2,172.

53. The additions and alterations to the Claremount premises at Nesbit Road, Byculla, for the accommodation of the Courts of the 2nd and 4th Presidency Magistrates, alluded to in the last report, were completed during the year at a total cost of Rs. 14,659, of which Rs. 6,883 were expended during the year.

54. A new Subordinate Judge's Court-house at Kalyán in the Thána Collectorate, estimated to cost Rs. 19,601, was commenced during the year. The design for this building is to be tried and considered with a view to adopting it as a standard plan ; it consists of a spacious court-room, open to the south, west and north, 30′ × 20′, with walls 18′ high, but with planked roof, so that the height in the centre is 25′, with a verandah, 7′ wide, which provides additional accommodation and shade, and extends completely round the court, excepting on the east side, against which the private rooms of the Judge abut, and are arranged to give a private entrance for the Judge direct from his chambers to the court. The chambers consist of two rooms, 16′ × 16′, with verandahs 7′ wide on each side, and open to the north and south ; at the east end of the chambers are rooms for clerks and officials, and attached to the ends of this block of rooms are wings providing accommodation for prisoners, witnesses, property, and peons. The outlay to the close of the year was Rs. 8,785.

55. A building providing accommodation for two Subordinate Judges' and one Joint Subordinate Judge's Courts, and for the Small Causes Court, estimated to cost Rs. 52,284, was commenced at Poona during the year, and Rs. 19,790 expended up to its close; and special repairs were carried out to the Subordinate Judge's Court at Sukkur, at a cost of Rs. 4,850.

56. Additional accommodation for the Benches of Magistrates and Honorary Magistrates at Poona has been provided in the old City Jail, by constructing a new court-room, with consulting and retiring rooms, and by making certain alterations and improvements to the old Magistrate's Court. The outlay has been Rs. 4,716, against the estimate of Rs. 5,450.

15.—ECCLESIASTICAL.

57. At Bombay, quarters for the Chaplain of Christ Church at Byculla, estimated to cost Rs. 30,959, were under construction ; they consist of an upper-storied building for residence, and blocks for kitchen, servants, stable and coach-house and servants' privy. The outlay to the close of the year was Rs. 10,716.

58. At Poona, a Campanile or tower for the Church of the Holy Name, erected by this department for the Society of St. John the Evangelist, the estimated cost of which is Rs. 22,552, was commenced, and the foundations excavated and filled in, the outlay of the year being Rs. 594. The design was prepared by Mr. J. Adams, the Architectural Executive Engineer, and is after the style of the campaniles in Northern Italy, the chief general characteristic of which is a structure of almost plain walls, rising to a height from the ground, and crowned by a low-pitched roof, with deep projecting eaves, carried by bold stone corbels. The campanile, as designed, is to be 15′ × 15′ inside measurements on ground floor, the belfry room, at a height of about 95 feet from the ground, being of the same dimensions, and 30 feet in height. The total height from the ground to the top of the tower will be 130 feet, with 4 feet plinth. Three landings are provided at 28, 52 and 77 feet from the ground, above which is the clock room, immediately below the belfry, about 18 feet in height. Timber corbelling has been introduced into the revised design as sanctioned, instead of the stone corbels in the original design. The entire cost has been contributed by the Society concerned.

59. A church for Native Christians of the Church Missionary Society at Poona was constructed during the year, at an outlay of Rs. 7,430, from funds contributed by the Society, at a total outlay of Rs. 7,430, against the estimate of Rs. 8,253. It consists of a nave, 52′ × 25′, a semi-octagonal chancel, 15′ × 12½′, and a vestry, 12′ × 15′.

60. A new cemetery at Dhárwár was completed during the year, at a cost of Rs. 4,893, against the estimate of Rs. 6,118 ; and Rs. 2,997 were expended on the water-supply of the new cemetery at Karáchi, in laying down a 3″ branch from the municipal main, extending the distribution pipes, and building new cisterns.

16.—JAILS.

61. The work of constructing a Central Jail for Gujarát at Ahmedabad, described in the report for 1891-92, was in progress during the year. Some delay was caused by materials indented for from England not having arrived, but the buildings have now been virtually completed, and the water-supply and drainage nearly so. The expenditure of the year was Rs. 59,999, and the total outlay from the commencement of the work Rs. 5,09,388, against the sanctioned estimate of Rs. 5,41,714.

62. The buildings for the new Central Jail for Sind, at Hyderabad, the general design and arrangement of which were described in the report for 1891-92, are practically complete. The entrance and show rooms were unfinished at the end of the year, but will be completed by the 30th May. The polygon enclosure walls have been completed, and half the main enclosure wall, the remainder of which will be ready by the end of June 1894. Four-fifths of the bathing and feeding platforms have been completed, and the remainder are in progress. The cement plastering to platforms, &c., has been deferred till the water-supply is laid on, for which alternative schemes have been proposed, one for a supply from the municipal main, the other for an independent supply from an infiltration well on the bank of the Fuleli. Estimates for both have been prepared, and either can be carried out without causing any excess on the estimate. The paths and roads in the jail yard have not been commenced, but will be ready by the 15th June, except as regards watering and rolling; the final coat of paint and the surface drainage also remain to be completed. The jail will be ready for occupation by the end of October 1894. The outlay of the year was Rs. 1,64,799, and from the commencement Rs. 3,89,299, against the sanctioned estimate of Rs. 4,56,040.

63. The site of the old civil jail at Hyderabad being required for the new Civil Hospital and Medical School, a new jail, on a site adjoining the District and Subordinate Judges' Court-houses, was commenced during the year. The outlay was Rs. 3,660, and the estimated cost Rs. 6,138.

64. In the Dhárwár Jail the work of providing increased lateral ventilation was completed at a cost of Rs. 2,743, against the estimate of Rs. 3,240; and an enclosure wall and additions and alterations to windows and cells at the District Jail at Bijápur were in progress, the outlay to the end of the year being Rs. 9,427 and Rs. 3,815, against the estimates of Rs. 15,951 and Rs. 5,971, respectively.

65. The quarters of the Jail Superintendent at Karáchi were improved at a cost of Rs. 3,643, against the estimate of Rs. 4,216.

17.—POLICE.

66. The budget estimate for the year contained a provision of Rs. 1,83,300 for new Police buildings, of which Rs. 21,170 were for works in progress, and Rs. 1,62,130 for new major and minor works. The actual outlay is detailed in a statement appended to this report, and the following is a brief account of the works carried out :—

Appendix B.

67. At Bombay, a new upper-storied Police chowkey was commenced and in progress at Oondria street, and an expenditure of Rs. 8,770 incurred, including Rs. 5,000, the value of the site, previously disbursed, against the sanctioned estimate of Rs. 12,520; 22 wooden chowkies for Police night guards have been provided at a total cost of Rs. 9,176, against the sanctioned estimate of Rs. 10,652; and certain additions and alterations to the portion of the Claremount premises at Byculla in the occupation of the Police were in progress, and Rs. 877 expended against the sanctioned estimate of Rs. 5,361.

68. New Police lines at Chikhli, in the Surat Collectorate, were in progress, and Rs. 7,752 expended against the sanctioned estimate of Rs. 11,161.

69. In the Kaira Collectorate, the Police lines at Wadia, in the Sankheda Mewás, were in progress, and Rs. 1,596 expended during the year, and Rs. 2,447 from the commencement, against the estimate of Rs. 2,700; the Police lines at

Pandu were completed at a cost of Rs. 861, against the sanctioned estimate of Rs. 865, the outlay of the year being Rs. 539; and the Police lines at Umreth were also completed at a total outlay of Rs. 4,241, against the estimate of Rs. 4,846, the outlay of the year being Rs. 195.

70. In the Mahi Kántha Agency, a Thánadár's kacheri at Wakhtapura, consisting of an office, quarters for 21 sepoys and sowárs, and stabling for five horses, also accommodation for a chief constable, and shed for witnesses, the whole surrounded by a wall, was commenced, and Rs. 752 spent, against the estimate of Rs. 15,751.

71. In the Poona Collectorate, the Police lines at Paud, described in the last report, were completed at a total outlay of Rs. 6,065, against the estimate of Rs. 6,533, the outlay of the year being Rs. 2,732; and the Police lines at Sirur were undertaken and completed during the year at an outlay of Rs. 3,669, against the estimate of Rs. 3,585.

72. In the Khándesh Collectorate, lines for 18 men of the Armed Police, in connection with the new Mámlatdár's kacheri at Shirpur, were under construction, and Rs. 942 spent, against the estimate of Rs. 4,821.

73. Police lines for the Treasury guard at the Mámlatdár's kacheri at Hubli, in the Dhárwár Collectorate, consisting of quarters for 10 constables, estimated to cost Rs. 3,518, and commenced in the past year, were completed at a cost of Rs. 3,171.

74. The Police lines for 32 men at Honávar, in the Kánara Collectorate, in progress from 1891-92, were also completed at a cost of Rs. 10,952.

75. Police lines for 100 men at Sátára were in progress during the year, the outlay being Rs. 15,864, against the estimate of Rs. 28,965.

76. In the Ratnágiri Collectorate, Police lines for 40 men at Vengurla, in progress from the past year, were completed at a cost of Rs. 11,968, against the estimate of Rs. 14,384; and an office for the Chief Constable at Rájápur was in progress, and Rs. 4,227 expended against the estimate of Rs. 5,911.

77. In the Karáchi Collectorate, the work of providing additional accommodation for the Police at Karáchi was commenced, and Rs. 9,997 spent against the estimate of Rs. 25,718; and that of increased accommodation in the store-room of the District Superintendent's office, commenced in the previous year, was completed at a cost of Rs. 3,210, against the estimate of Rs. 2,303.

78. In the Shikárpur Collectorate, the Police lines at Kandhra, described in the last report, were completed at a cost of Rs. 6,829, of which Rs. 4,979 were spent during the year; and lines for the Town Police at Lárkhána were commenced, and Rs. 6,000 spent, against the sanctioned estimate of Rs. 7,533.

79. In the Hyderabad Collectorate, the old Mukhtyárkarate at Kandiáro was converted into Police lines, and Rs. 4,666 spent against the estimate of Rs. 5,353; and by a small outlay the old Mukhtyárkarate at Naushahro was also converted into Police lines; and the Police lines at Tulhar, described in the report for 1891-92, were completed during the year at a total cost of Rs. 5,502, against the estimate of Rs. 5,681.

80. Stabling to accommodate 6 horses was provided in the Mounted Police lines at Umarkot, in the Thar and Párkar District.

18.—EDUCATIONAL.

81. Under this head a large number of buildings were in progress in various parts of the Presidency, the detail of which is as follows:—

82. *Buildings classed as Provincial.*—At Bombay, the low-lying ground to the south of the Elphinstone College was levelled and filled in at a cost of Rs. 2,980; and certain additional works were undertaken in connection with the Elphinstone Middle School, and a sum of Rs. 4,376 expended during the year, bringing up the total outlay to Rs. 56,634, against the sanctioned estimate of Rs. 66,814.

83. At Ahmedabad, additions and alterations to the Mahálakshmi Female Training College were taken in hand, and Rs. 9,590 spent against the estimate of Rs. 15,234.

84. At Poona, minor improvements were carried out to the residence of the Principal of the Deccan College, completed in the past year, at an outlay of Rs. 982, bringing up the total outlay to Rs. 23,805, against the estimate of Rs. 25,436; and materials were collected for commencing the work of constructing quarters for 32 resident students, the sanctioned estimate for which amounts to Rs. 25,995, and Rs. 1,469 spent during the year.

85. A house was purchased for the official residence of the Superintendent of the workshops attached to the College of Science, for a sum of Rs. 3,000.

86. In connection with High Schools, additions and alterations to the Byramji Jijibhoy High School at Thána were carried out at a total cost of Rs. 3,509, against the sanctioned estimate of Rs. 3,444; the additional two rooms to the Nadiád High School, mentioned in the last report, have been completed at a total cost of Rs. 2,506, against the estimate of Rs. 2,748; the Ráo Bahádur Govindráo Rámchandra Garud High School at Dhulia, mentioned in the last report, was commenced during the year, and Rs. 266 spent, against the estimate of Rs. 60,686; and a residence for the head master, and quarters for resident students, with subsidiary out-houses, in connection with the High School at Hyderabad, estimated to cost Rs. 13,350, were commenced during the year, and Rs. 8,369 spent up to its close. A hall in connection with the same school, estimated to cost Rs. 15,584, to be designated the "Metharám Hall," to commemorate the name of the native gentleman who contributed largely towards its cost, was commenced, and Rs. 1,514 expended during th e year.

87. *Private Buildings assisted by Government Grants-in-aid.*—At Bombay, outbuildings for the Anjuman-i-Islám School, completed in the past year, were commenced and completed during the year at an outlay of Rs. 7,025; and certain additions and improvements to the St. Peter's School at Mázgaon were carried out, from the unexpended balance of contribution, at an outlay of Rs. 5,323, against the estimate of Rs. 6,149.

88. At Ahmedabad, material for the new Gujarát College building, to be commenced in 1894-95, was collected at an outlay of Rs. 13,105. Plans and estimates for the college and subsidiary buildings, the latter amounting to Rs. 1,79,985, were prepared by Mr. J. Adams, the Architectural Executive Engineer, and have received the sanction of Government. A moiety of the cost of the buildings will be contributed by Government, and the other moiety will be borne by the College Board, assisted by contributions from Local Bodies. The late Surgeon-General David Wyllie having bequeathed a legacy of Rs. 50,000 for the benefit of the community of the City of Ahmedabad, it has been arranged to spend Rs. 37,000 from this amount on the construction of lecture rooms in the college, to be called the "Wyllie" Rooms. A description of the buildings will be given in the next report.

89. A school for girls at Meethganj Peth, Poona, for the Church of Scotland Zenana Mission, estimated to cost Rs. 6,686, inclusive of Rs. 1,200, the value of the site, a moiety of the cost of which has been contributed by Government, and the other moiety from the Mission funds, was commenced during the year, and Rs. 1,584 expended.

90. At Igatpuri, in the Násik Collectorate, a convent school for girls, estimated to cost Rs. 9,596, of which a moiety has been contributed by Government, was commenced during the year, and the building practically completed within the estimated amount.

91. *Buildings undertaken wholly from contributions.*—From the balance of the original contribution for the Framji Dinsha Petit Laboratory, at the Jamsetji Jejeebhoy Hospital at Bombay, apparatus, costing Rs. 7,325, have been obtained from England by the medical authorities, and passed through the accounts of this department.

92. *Local Fund and Municipal Buildings.*—A school-house at Chichondi Patel, in the Ahmednagar Collectorate, for 100 boys, of the Khándesh standard pattern, was commenced and completed at a cost of Rs. 2,714.

93. In the Khándesh Collectorate, 14 major school-houses were in progress, the outlay on which during the year amounted to Rs. 20,537, and 14 minor school-houses, the outlay on which amounted to Rs. 7,530, as below :—

		Estimate.	Expenditure from Commencement.	Allotment.	Expenditure during 1893-94.
	Major Works.	Rs.	Rs.	Rs.	Rs.
1	School House at Mamurabad for 60 boys	2 638	2,129	1,560	1,337
2	Do. do. Bhadli for 100 boys	2,941	3,239	2,200	1,950
3	Do. do. Wiwre for 150 boys	5,141	2,666	2,388	1,413
4	Do. do. Nimbhora for 100 boys	2,753	3,079	2,333	1,939
5	Do. do. Rasalpur for 60 boys	2,518	2,097	1,283	1,341
6	Do. do. Padalse for 80 boys	3,164	2,422	1,861	1,465
7	Do. do. Neri for 80 boys	3,162	2,379	1,909	1,443
8	Do. do. Tandulwadi for 80 boys	3,099	2,104	2,000	1,344
9	Do. do. Shelgaon for 60 boys	2,617	1,985	1,700	1,286
10	Do. do. Pachora for 100 boys	2,753	2,175	2,444	1,867
11	Do. do. Kochur for 60 boys	2,538	2,090	1,450	1,317
12	Do. do. Bhalode for 250 boys	7,306	79	2,946	79
13	Do. do. Nagardewla for 150 boys	3,640	4,296	1,699	2,355
14	Do. do. Waghli for 125 boys	3,419	3,538	1,298	1,401
	Total ...	...	...	...	20,537
	Minor Works.				
15	School House at Nargaon for 40 boys	1,792	1,253	447	423
16	Do. do. Nimboli for 40 boys	1,878	1,242	1,120	686
17	Do. do. Warshi for 80 boys	2,247	1,293	1,281	328
18	Do. do. Dangshirwada for 40 boys	1,208	756	940	488
19	Do. do. Kadgaon for 80 boys	2,359	2,510	1,620	1,411
20	Do. do. Borekoond for 80 boys	2,145	1,057	2,145	1,057
21	Do. do. Sindi for 40 boys	1,316	34	1,277	34
22	Do. do. Dondaicha for 80 boys	2,145	74	2,145	74
23	Do. do Kapadna for 60 boys	1,698	1,764	284	350
24	Do. do. Fagna for 60 boys	1,698	1,690	1,260	251
25	Do. do. Kalmadoo for 40 boys	1,277	1,246	219	188
26	Do. do. Girad for 40 boys	1,277	1,264	272	259
27	Do. do. Tamaswadi for 80 boys	2,247	2,556	1,300	1,193
28	Do. do. Memwei for 40 boys	1,889	1,541	944	788
	Total ...	...	...	...	7,530

94. Revised plans and estimates, the latter amounting to Rs. 38,601, for a vernacular school-house for 600 boys at Dhulia, were prepared and submitted for sanction. The work was not in progress, but a small outlay was incurred in collecting materials and in laying the foundation stone.

95. In the Belgaum Collectorate, school-houses were completed at Manoli for 200 boys, for Rs. 7,830 ; and were in progress at Benadi for 100 boys, Akol for 100 boys, Jatrat for 75 boys, Ainápur for 170 boys, and Kagwad for 150 boys, and Rs. 2,882, 1,639, 525, 3,402, and 370 expended, respectively.

96. In the Dharwar Collectorate, school-houses were completed at Mantur, Masun and Sanklepur, for 75, 100 and 150 boys, for Rs. 3,402, 4,680 and 2,495, respectively ; and were in progress at Kurtkoti for 150 boys, and at Guttal, as well as additions and alterations to the school-house at Bankápur, and Rs. 410, 3,933, and 427 expended.

97. In the Bijápur Collectorate, a school-house in the Juma Masjid Peth at Bijápur was completed for Rs. 3,724; and one was in progress at Nagral, and Rs. 1,578 expended.

98. In the Ratnágiri Collectorate, a school-house at Gohágar was completed for Rs. 3,059; and one was in progress at Murud, in the Kolába Collectorate, the outlay being Rs. 3,382.

99. In the Thána Collectorate, a new school-house for 75 boys at Karjat, commenced in the previous year, was completed at a total cost of Rs. 2,628.

100. In the Hyderabad Collectorate, quarters for the students of the Agricultural School, situated in the Model Farm at Hyderabad, to replace those destroyed by a flood in 1892, were commenced and completed during the year at a cost of Rs. 2,532, against the estimate of Rs. 2,543 ; and the renewal of the roof of the

School-house at Tharushah, commenced in the past year, was completed at a cost of Rs. 2,876, against the estimate of Rs. 2,885, the outlay of the year being Rs. 1,181.

101. An office, school, store, and cart shed for the Subarban Municipality at Poona, estimated to cost Rs. 10,936, were in progress, and Rs. 3,856 expended to its close. The construction of the office has been postponed for want of funds.

19.—MEDICAL.

102. At Bombay, water fittings to the male ward of the St. George's Hospital, completed in the past year, were carried out, as well as other minor items; a garden was laid out in the compound; and sculleries, one on each floor, each 10′ × 11′ 4″ and of the same construction as the hospital, were constructed, the outlay of the year being Rs. 5,509, and the total outlay Rs. 4,31,131, against the sanctioned estimate of Rs. 4,64,080.

103. At the Jamsetjee Jejeebhoy Hospital, Ward No. 1 has been converted into an operating theatre at a cost of Rs. 2,650; and additions and alterations to the Nursing Sisters' quarters, consisting of the addition of a second floor, and extending the verandahs on all the floors, estimated to cost Rs. 13,107, were taken in hand, and Rs. 12,319 expended. The amount required for the latter was raised by public subscriptions from wealthy Native firms and private individuals, through the good offices of Her Excellency Lady Harris, C.I., and Mr. H. A. Acworth, I. C. S., the Municipal Commissioner for the City of Bombay who acted as Honorary Treasurer to the fund formed for the purpose, called the "Nurses' Home Fund." The additions and improvements carried out from the amount so contributed have greatly improved and amplified the accommodation for the nursing establishment of the Jamsetjee Jejeebhoy, Dinshaw Máneckjee Petit, and Bái Motlibái Hospitals, and the acknowledgments of Government have been conveyed to the contributors for their generous aid.

104. At Poona, a large quarry in front of the Sassoon Hospital has been filled up at an outlay of Rs. 7,098.

105. An enclosure wall, with entrance gates, to the Hospital for Women and Children in the City of Poona, erected by the Church of Scotland Mission, assisted by a Government grant-in-aid, described in the report for 1891-92, and which was completed in the past year, were constructed during the year, the outlay in which was Rs. 1,150, and the total from the commencement Rs. 37,402.

106. A new Civil Hospital and Medical School at Hyderabad, estimated to cost Rs. 88,243, was commenced during the year; two wings and the ground floor of the main building, and the walls of the upper floor to a height of about 4 feet were finished, and nearly three-fourths of the out-buildings, the outlay of the year being Rs. 54,603, and the total from commencement Rs. 55,376.

107. Additions and alterations to the European General Hospital at Steamer Point, Aden, estimated to cost Rs. 6,969, were commenced during the year, and about half finished, the outlay of the year being Rs. 3,291; and certain additional articles of furniture were supplied at a cost of Rs. 176.

108. A new ward to provide additional accommodation at the Civil Hospital, Sátára, was in progress, the outlay being Rs. 6,402, against the estimate of Rs. 6,638.

109. Additions to the Hospital at Kaira, a Local Funds building, estimated to cost Rs. 9,727, of which Rs. 4,300 have been contributed from Provincial Funds, were commenced during the year, and a sum of Rs. 3,314 expended.

110. The addition of an upper story to the Civil Surgeon's bungalow at Godhra, at an estimated cost of Rs. 5,472, was commenced, and Rs. 2,408 expended.

111. A Local Fund dispensary at Kalvan in the Násik Collectorate, described in the last report, was completed during the year at a cost of Rs. 4,870, against the estimate of Rs. 4,923; also a dispensary at Páchora in the Khándesh Collectorate, at a cost of Rs. 8,394, against the estimate of Rs. 9,125; a dispensary at Navápur, estimated to cost Rs. 9,670, was nearly completed, the outlay of the

year being Rs. 7,610; and a dispensary at Sháháda, commenced about the close of the past year, is in progress, the outlay being Rs. 3,980, against the estimate of Rs. 8,485. The construction of a new dispensary at Kotri, in the Karáchi Collectorate, was commenced, and Rs. 6,731 spent, against the estimate of Rs. 8,884; and materials to the extent of Rs. 1,017 and Rs. 4,500, respectively, were collected, against estimates of Rs. 8,615 each, for the construction of dispensaries, on the standard plan, at Ubauro and Garhi Yásin in the Shikárpur Collectorate. Quarters for the Hospital Assistant at Sinnar, in the Násik Collectorate, on the standard plan, estimated to cost Rs. 4,123, were commenced during the year, and Rs. 1,789 spent.

20.—MISCELLANEOUS.

112. At Bombay, a wing to the south of the west end of the Public Works building was commenced during the year, of the same style of construction as the main building. The estimated cost is Rs. 76,615, and the outlay of the year has been Rs. 19,610.

113. Additional iron record racks in the General Record-room, for the use of the Accountant General's office, were under provision during the year, and Rs. 5,164 spent, against the estimate of Rs. 10,620.

114. At Poona, bungalow No. 310 in the Photozincographic buildings has been re-roofed with corrugated galvanized iron sheeting and single tiles, at a cost of Rs. 3,363, against the estimate of Rs. 3,589.

II.—COMMUNICATIONS.

115. The total outlay on Communications was Rs. 24,39,307, sub-divided as under :—

	Rs.
Original Works	4,79,995
Repairs	14,29,840
Establishment	4,92,195
Tools and Plant	37,277
	24,39,307

116. A statement showing the extensions of Imperial, Provincial and Local Funds roads, under Public Works Agency, during the year is attached to this report. Appendix D.

117. Since the last report was issued, the statements of Local Funds and Municipal roads maintained by Civil Agency for the years 1890-91 and 1891-92 have been completed and issued as supplements to the Reports for those years. The statements of extensions of these roads for the years 1892-93 and 1893-94 will shortly be taken in hand, and, when completed, will also be issued as supplements to the reports for those years.

118. A statement showing the progress made in the demarcation of roads, under Public Works Agency, in the Northern, Central, Southern, and Indus Right Bank Divisions for 1893-94, is attached to this report. Appendix E.

119. A map, in three sheets, showing the progress made during the year on the principal lines of road, is also appended to this report. Appendix F.

120. The works carried out during the year have been as follows :—

I.—METALLED AND BRIDGED ROADS.

121. **Surat and Broach District.**—*Road from Surat to Sachin within the limits of the Sachin State.*—The metalling has been completed during the year at a total cost of Rs. 25,015, of which Rs. 555 were expended during the year, against the sanctioned estimate of Rs. 26,484.

122. *Road from Sachin to Lajpur.*—The metalling of this road has been completed during the year at a total cost of Rs. 12,654, of which Rs. 426 were expended during the year, against the sanctioned estimate of Rs. 13,755.

123. *Surat-Bárdoli road within British limits* (*Local*).—The total length of the road to be metalled, *viz.*, from Surat Municipal limits to the Baroda frontier beyond Kumbharia, is 5¼ miles. The metalling is to consist of a 4″ layer of dungri metal, laid over a 4″ layer of river gravel. Materials for over three miles have been collected during the year, and a sum of Rs. 14,522 has been expended, against the sanctioned estimate of Rs. 33,711.

124. *Road from Bárdoli to Surbhon* (*Local*).—The improvements to this road, which is 5⅛ miles in length, were in progress during the year. The road is bridged and drained, and has a very heavy traffic on it. Nearly the whole quantity of metal required has been collected, and will be consolidated during the next monsoon. The sanctioned estimate amounts to Rs. 16,384, of which Rs. 8,588 have been spent during the year.

125. *Surat-Sachin road.*—A low-level wooden pile bridge on the Un Khádi, on the Surat-Sachin road, in Sachin territory, described in the last report, has been completed at a total cost of Rs. 6,335, of which Rs. 4,390 were expended during the year.

126. **Kaira District.**—*Petlad-Cambay road* (*Local*).—The British portion of this road has been practically completed, and the first 12 miles from Petlád, which include the Baroda section of the road, have been opened for traffic since December last. Rs. 2,191 were expended during the year, and Rs. 52,769 from the commencement of the work, against the sanctioned estimate of Rs. 53,159.

127. The remaining six miles to Cambay were commenced in May. The supply of metal to this road is a special difficulty, as the cost of bringing metal from Páli is prohibitive, and the only alternative was found to be to bring it by sea from Párdi in the Surat District. The landing at Cambay, however, presented another difficulty: boats cannot approach nearer to the town than about two miles, and the intervening space is a mud swamp, through which merchandise is dragged with great difficulty and at high cost. In order to minimize these drawbacks, a canal has been constructed through the mud flat, advantage being taken of one of the small creeks; and the metal is transhipped into flat-bottomed boats, which are dragged up the canal to the town. If this canal can be kept clear of silt by scour during the rains (special arrangements have been made to facilitate this), it will not only prove useful to the road work, but will confer a great benefit upon the trade of the town.

128. The Cambay State portion is 5 miles and 972 feet long, and its cost is estimated at Rs. 47,377. It has been laid out in the same way as the rest of the road, with gradients and curves suitable for a railway, and later on it is hoped the A'nand-Petlád branch line may be extended over this road to Cambay. The earth-work was completed for 4½ miles, and the collection of materials proceeded with. A sum of Rs. 18,114 has been expended during the year.

129. *Road from Nadiád to Kapadvanj.*—This road is 27 miles long, and was, by the end of the year, metalled for 18 miles. Two miles were metalled during the year, and metal was collected up to the full amount the funds permitted. Rs. 11,734 were expended during the year, making a total expenditure of Rs. 19,678, against the sanctioned estimate of Rs. 67,073.

130. *Wajeria road* (*State*).—The pleasure road at Wajeria has been in progress during the year, and revised proposals, which involved a practically fresh survey and new plans, estimated to cost Rs. 7,661, have been sanctioned. A total expenditure of Rs. 3,451 has been incurred, including Rs. 2,457 spent during the year.

131. **Ahmedabad District.**—*Road from Ahmedabad to Bareja, 11 miles* (*Local*).—This road has been continued, and the first six miles have been consolidated and opened for traffic; on the remainder, broken bricks and kunkur have been collected, but the question of providing the latter is one of great difficulty,

and it will be impossible to finish the road in 1894-95. Rs. 13,790 were spent out of an allotment of Rs. 15,000, bringing the total expenditure up to Rs. 76,520, out of an estimated cost of Rs. 1,15,625.

132. *Road from Dhandhuka to Tugdi* (*Local*).—A further sum of Rs. 2,000 has been spent in improving this road. The total expenditure has been Rs. 18,137, against an estimated cost of Rs. 24,843.

133. **Poona District.**—*Masonry bridge over the Mula river at Dápuri.*—This bridge is intended to replace an old bridge, erected about the year 1835, over the river Mula near Dápuri, on the Poona-Bombay road, the foundations of which were found to be insecure, and the superstructure weak and rotten through age. The new bridge will provide a slightly increased waterway, and is to be a masonry structure of 13 spans, each of 40 feet, with segmental arches. There are to be two abutment piers, and the whole to be founded on rock. The finished roadway will be 25 feet in width, and will be provided with an iron railing fixed to T iron standards, a similar railing being also provided on the long built approach on the Poona side, thus giving the greatest width possible to the traffic. The total length of the bridge from abutment to abutment will be 605 feet. The removal of the old wooden and masonry structure was partially completed, and the unwatering of foundations taken in hand. The foundations of 3 of the 12 piers were commenced, and progress made in excavating the others down to rock. A ford diversion road, a mile in length, and 20 feet wide, was opened for traffic before the demolition of the bridge, and repairs to an old road were taken in hand, diverting the traffic round by Holkar's bridge, for use during the rains. The amount of the sanctioned estimate is Rs. 1,60,387, and the total outlay has been Rs. 22,448.

134. *Bombay Mail road.*—The old wooden superstructures over drains Nos. 102, 103 and 117 on the Bombay Mail road, have been removed, and Horbury's rolled steel plates, with angle iron gussets, &c., and a hand railing of wrought iron piping, in T standards, fixed instead, at an outlay of Rs. 3,716.

135. **Kha'ndesh District.**—*Metalling portion of the Bombay and Agra road, north of the river Tápti.*—This work, which has been in progress since 1887, was completed during the year; the length so metalled is 28 miles (81 to 109). The Bombay and Agra road is now wholly metalled from Málegaon to Gawlan Ghát (at the top of the Sátpuda range), *i. e.*, from miles 21 to 109, and now affords increased facilities for traffic. The amount of the sanctioned estimate is Rs. 64,210, and the expenditure during the year was Rs. 1,579.

136. *Owadi Nála Bridge, on the Bombay and Agra road.*—This new bridge, which was in progress last year, was completed during the year at a total outlay of Rs. 13,882, against an estimate of Rs. 16,515, the expenditure during the year being Rs. 1,256.

137. **N'asik District.**—*Dhond and Manmád road* (*Provincial*).—Special repairs to the skew bridge in mile 2 near Manmád, described in the last report, were completed during the year at a total cost of Rs. 5,680, against the estimate of Rs. 5,700.

138. *Násik and Trimbak road* (*Local*).—The road is 18 miles long, and is now metalled throughout. Metal was necessary to resist the heavy timber and grass traffic by carts, and pilgrim traffic by tongas. The total cost has been Rs. 17,938, against the estimate of Rs. 18,110.

139. **Dha'rwa'r District.**—*Poona-Harihar road* (*Provincial*).—Bridges Nos. 214 and 216 on this road being of very old construction, and in a dilapidated condition, their reconstruction was put in hand during the year, but, owing to non-receipt of the rolled iron girders ordered from England, the work could not be completed. The outlay during the year was Rs. 4,034, against the estimate of Rs. 8,354.

140. **Ratna'giri District.**—*Belgaum-Vengurla road* (*Provincial*).—Bridge No. 491 on this road, of one span of 15 feet, with segmental arch, rise $\frac{1}{4}$ span, showed very serious defects in the original masonry, and it was therefore

decided to entirely reconstruct it of the original dimensions. The work was completed during the year at an outlay of Rs. 3,026, against the estimate of Rs 3,030.

II.—RAISED, BRIDGED AND UNMETALLED ROADS.

141. **Tha'na District.**—*Máhim-Váda road* (*Local*).—This road was so far completed that traffic could pass throughout the whole road. The expenditure during the year was mainly on surfacing banks and small drains, and amounted to Rs. 4,192, bringing up the total spent on the Manor-Váda portion of the road to Rs. 58,688, against the sanctioned estimate of Rs. 70,596.

142. *Ulhas river ford* (*Local*).—At Karjat, a ford over the Ulhas river, estimated to cost Rs. 2,812, was in progress, and Rs. 1,612 were expended, making the total spent on the ford Rs. 2,795.

143. *Bhynder-Utan road* (*Local*).—Rs. 1,338 were spent on surfacing, and this road is now in use from Utan to Bhynder, and with the exception of the 5th mile, which has still to be surfaced, is in good order. The amount spent on it up to end of the year is Rs. 19,655, against the sanctioned estimate of Rs. 33,879.

144. *Kalyán-Dhaisar road* (*Local*).—This road was practically completed, with the exception of a bridge over the Desai Creek. This bridge is of 12 spans of about 20 feet, the roadway being carried upon rolled beams, resting upon piers. Owing to the foundations being rock on one side, shelving gradually so that there was deep sand and mud on the opposite bank, it was necessary to make the abutment and six piers on one side of masonry, and the remainder of piles. The masonry abutment and four masonry piers were completed during the year, and good progress made with the foundations of a fifth pier; the timber piers were also advanced towards completion. The total expenditure to date amounts to Rs. 32,410, of which Rs. 10,937 were expended during the year. The sanctioned estimate amounts to Rs. 41,911.

145. **Surat and Broach District.**—*Broach-Jambusar road* (*Local*).—The first three miles of this road are metalled with dongri metal; it is now proposed to similarly metal the next four miles, as the traffic on this part of the road is very heavy. Nearly three-fourths of the required quantity of metal has been collected during the year, which will be consolidated during the next monsoon. The sanctioned estimate amounts to Rs. 38,484, and Rs. 18,538 have been expended during the year.

146. *Bridge across the Mugnad Khádi, on the Broach-Jambusar road* (*Local*).—The bridge is to be of 3 spans of 9 feet, with wooden pile piers and masonry abutments; the roadway is to consist of old rails laid flat, with a layer of tar, concrete, and metal on the top. The estimate amounts to Rs. 4,275. The foundations of the bridge were in progress, and materials were being collected during the year at a total cost of Rs. 3,221.

147. *Bhátha road* (*Local*).—The work of providing a dip near the Hope Bridge, on the Bhátha road, in Chorási Táluka of the Surat Collectorate, was completed during the year. The dip is 161 feet long, and is paved with rough dongri stones, with a row of round teak piles on each side. A sum of Rs. 2,780 was expended, against the sanctioned estimate of Rs. 2,781.

148. A low-level wooden pile bridge on water-course No. 2, in mile No. 1, on the road from Hope Bridge to Bhátha, in Chorási Táluka of the Surat Collectorate, described in the last report, has been completed. The total expenditure has been Rs. 3,068, of which Rs. 679 were expended during the year.

149. *Puna-Saroli road.*—A bridge over the Morwani Nála, on the Puna-Saroli road, in the Sachin State, described in the last report, has been completed. The total expenditure has been Rs. 4,248, of which Rs. 593 were expended during the year.

150. *Hope Bridge-Ránder road* (*Local*).—A bridge over the nála near Ránder, described in the last report, has been completed at a total cost of Rs. 5,455, against the sanctioned estimate of Rs. 5,461.

151. *Road from Surat Railway Station to Varacha (Local).*—The total length of this road is 3 miles and 1,700 feet from Surat Railway Station to Varacha: it is a raised and gravelled road, bridged and drained throughout. The whole of the work has been nearly completed, with the exception of gravelling the surface. The sanctioned estimate amounts to Rs. 14,996, of which Rs. 11,132 were expended during the year.

152. *Valandi Bridge, No. 35, on the Bulsár-Dharampor road (Local).*—The existing planked roadway of this bridge having become rotten, and the masonry piers shaky, it is proposed to reconstruct the bridge, by providing 3 spans of 26 feet, with a timber roadway supported on rolled steel beams. The bridge will be completed before the next rains. The sanctioned estimate amounts to Rs. 6,888, and Rs. 3,662 were expended during the year.

153. **Ahmednagar District.**—*Road from Randha to Samrad.*—An allotment of Rs. 8,348 for continuing this road was made, and nearly the whole of the amount was expended during the year, bringing the total expenditure up to Rs. 28,663, against the estimated cost of Rs. 29,924. Road dams across the Ratanvádi and Sheptelvádi nálas have been completed. Protection with dry stone walling has been completed wherever at dips the embankment was liable to be scoured, and 8 miles have been murammed and consolidated. Nearly the whole of the work has been completed, and the whole length of the road has been demarcated.

154. *Road from Jámgaon to Kotul.*—Rs. 7,327, out of an allotment of Rs. 7,652, have been spent during the year in continuing this road: it crosses the Mula river near Kotul, and on the down-stream side of the same a masonry dam has been built; one other road dam has also been constructed, eight miles of road surface have been murammed and consolidated, and muram has been collected for the remaining two miles, which will be completed during the next monsoon. A store-house at Kotul has been completed; and 9½ miles of the road demarcated. The total expenditure has been Rs. 27,880, out of the estimated cost of Rs. 28,594.

155. *Supa-Pimpalgaon-Dipa road (Local).*—The work of improving this road, by excavating side gutters, and forming the road embankment with the material available therefrom, was confined to miles Nos. 45, 46, 47, and portion of 48. The road surface was also improved in these and in the other miles already partially improved, by blasting portions of rock projecting over the road surface. The grant of Rs. 1,500 was nearly all expended, and a further grant to the same amount has been provided for next year.

156. *Shrigonda-Kharda road (Local).*—This road has been now improved up to Khadkat, *i.e.*, up to the river Sina, the river crossing about 34½ miles from Pimpri Railway Station. The remaining portion of this road beyond the Sina river is merely a country track, and a survey for the construction of the road to Jámkhed, 11 miles, and on to Kharda, 14 miles, is to be undertaken. Rs. 150 were expended during the year, being the balance of the estimated cost of Rs. 650.

157. *Road from Nevássa to Shevgaon.*—Operations during the year were neglected by the Sub-divisional Supervisor, and although contracts for slab drains and road dams and also for collection of muram in certain miles were entered into in April, yet nothing practically was done up to December 1893. The work was then prosecuted with vigour, and Rs. 6,909, out of the allotment of Rs. 7,000, were expended, bringing up the total expenditure to Rs. 23,594, out of the estimated amount, Rs. 43,482.

158. *Thugaon-Kotul road (Local).*—This road has been partly improved during the year by excavating catchwater drains, and cuttings, where necessary, in earth and muram, rock and boulders. The outlay was Rs. 300.

159. **Shola'pur District.**—*Poona-Hyderabad road.*—The work of constructing a raised road dam on the Shelgi Nála, in mile No. 149 of the Poona-Hyderabad road, was in progress; concrete foundations to masonry have been nearly completed. Both up and down-stream walls have been constructed to the length of 260 feet and 60 feet, respectively; excavation for water cushion has

also been made for a length of 150 feet. The outlay has been Rs. 7,614, against the estimate of Rs. 11,324.

160. *Jeur-Karmála road.*—The length of this road is 11 miles, and 2 miles are metalled yearly, as funds are not available for the whole length at once. Up to the end of the year 4 miles had been metalled. The amount of the estimate is Rs. 19,358, and the total outlay Rs. 6,497, of which Rs. 3,498 were spent during the year.

161. **Na'sik District.**—*Hasteh and Barhe road* (*Local*).—The road is in exceedingly mountainous country, and is used almost exclusively for forest traffic. The last mile, which is on the high Barhe plateau, is comparatively level, and the expenditure has been on completing this portion, and on coating the remainder with muram, where this work had been left undone. The estimate is Rs. 25,510, and the total expenditure has been Rs. 21,973.

162. *Násik, Dindori and Kalvan road* (*Local*).—A masonry causeway across the Kalvan river was commenced. The causeway consists of two masonry walls across the river, the space between being filled in with sand and paved. Four culverts have been made through the centre to pass the perennial flow of the river. The up-stream wall is founded on rock, where met with, at a depth of not more than 9 feet, and on clay or boulders elsewhere; the down-stream wall is founded on rock for its whole length. Rock has been found at a depth of 16 feet up to within 20 feet of the north end, and is expected at a depth not exceeding 19 feet for the rest of the work. The estimate amounts to Rs. 5,811, and the outlay of the year is Rs. 1,238.

163. A masonry causeway across the Oonan river was also commenced. Two culverts are left through the centre for the passage of the dry weather flow. The foundations are on rock across the whole width of the river, and no difficulty has been met with in putting them in. The work is well advanced towards completion, the expenditure during the year being Rs. 1,578, against the estimate of Rs. 2,510.

164. *Ghoti-Barighát road* (*Local*).—Special repairs, consisting of coating the first two miles with metal, and the remaining 11 miles with muram, were completed during the year, at a total cost of Rs. 12,519, against the estimate of Rs. 13,032.

165. *Road from Dhalbari to Shelbari* (*Local*).—This road connects the Khándesh and Nizám's Frontier road, which is now made to Dhalbari. The country traversed is hilly, but the road is carried over fairly level, and mostly cultivated lands, but following, wherever practicable, the existing cart track. It may be described as unbridged, as only three masonry works are proposed. The length to be constructed is 10 miles, and it is to be a surface road. The work done during the year consisted of demarcating road boundaries, excavating side gutters and catchwater drains, levelling the road, and collecting muram, at a cost of Rs. 3,303, against the estimate of Rs. 34,348.

166. *Dubera-Thangaon road* (*Local*).—The work in progress was constructing the road through a mountain pass, half a mile long: it consisted of rock and muram cutting into hill side, muram embankment down the slopes, excavation of catchwater drains, and the building of two dry stone retaining walls, which were all completed, and building a slab drain and a small culvert, and collecting and spreading muram, which was in progress; the expenditure to end of the year being Rs. 4,527, against the estimate of Rs. 5,617.

167. *Násik-Waghera road* (*Local*).—Three miles have been metalled with hard muram, and material has been collected for spreading and consolidating during the rains of 1894. The expenditure has been Rs. 8,329, against the estimate of Rs. 11,202.

168. **Kha'ndesh District.**—*Road from Amalner to Chapda, section from Amalner to the Tápti.*—The work on this road was first commenced in 1886-87, and about 2½ miles of embankment nearly completed, when it was suspended for want of funds. Provision for the road being made in the Budget for the year

under review, it was considered advisable to re-survey the part of the road from Amalner to Patonda. The plans and estimates based thereon were prepared in rough, when it was decided to adhere to the old alignment. Tenders were then called for, but none were accepted; finally the work was begun departmentally at about the end of February, and thus the progress on the work during the year was inconsiderable. The outlay during the year was Rs. 313, against the sanctioned estimate of Rs. 63,436.

169. *North and south approaches to the river Tápti on the Dharangaon-Chopda road.*—The work described in the year's report has been in progress by contract. These approaches serve as a link to connect Chopda with Dharangaon and Jalgaon on one side, and with Amalner and Dhulia on the other. The estimated amount is Rs. 24,401; and the expenditure during the year has been Rs. 8,820.

170. *Road from the Tápti river to Chopda.*—Chopda is an important táluka town, but has not yet a made road to connect it with other centres of traffic in the district. The Jalgaon-Dharangaon road is made up to the river Tápti, and the approaches to the Tápti at Sávkheda and Nimgavan are nearly completed, and the proposed road is intended to connect the approaches at Nimgavan with Chopda through the deep black soil, over which at present, during the rains, cart traffic is almost impracticable. When the road from Amalner to the Tápti (rightly speaking from Amalner to a point on the Dharangaon-Tápti road *viâ* Patonda) is constructed, it will connect Chopda with Amalner and Dhulia on one side, and Dharangaon, Erandol and Jalgaon on the other. The work was given by contract, but a question arose about the suitability of the alignment, and there was little progress. The estimate is Rs. 51,234, and the expenditure has been Rs. 689.

171. *Junction road at Bhadgaon.*—The expenditure to the end of the year on this short road was Rs. 5,621, against the estimate of Rs. 6,147, that during the year being Rs. 2,209. The road was practically completed during the year, but as the consolidation is not perfect, it is intended to fill up ruts and consolidate it again in the rains of 1894.

172. *Bhadgaon-Talváda road.*—The improvements to this road, referred to in the last report, have been continued during the year at a cost of Rs. 817, the total expenditure incurred being Rs. 4,433. Plans and estimate for further improvements, amounting to Rs. 7,553, have been sanctioned during the year.

173. *Jalgaon-Dharangaon road.*—The work of metalling this road, as described in the last report, is in progress; 2¼ miles have been metalled, and materials for one mile were collected. The amount of the estimate is Rs. 14,462, and the expenditure has been Rs. 6,298.

174. *Road from Bhusával to Jalgaon.*—This road is in progress, as described in the last report. A length of about three miles of earthwork has been completed, and the collection of materials for surfacing was in progress. The amount of the estimate is Rs. 12,315, and the expenditure during the year was Rs. 4,316.

175. *Chálisgaon-Outramghát road.*—This road is 13½ miles in length; out of these, 6¼ miles of the ghát proper were metalled when the road was made, and the metalling of the remaining 7¼ miles was in progress. The amount of the estimate is Rs. 14,278, and the expenditure has been Rs. 2,333.

176. *Songir-Nandurbár road.*—The portion of the road from Songir to Dondaicha (23 miles) has been metalled; but from Dondaicha to Nandurbár (21 miles) the road is only a murammed road. Since the completion of the road in 1890, the traffic from Nandurbar is annually increasing, and the building of a ginning factory at Ranála has given a stimulus to, and increased the heavy traffic from Ranála (half-way between Dondaicha and Nandurbár) to Dondaicha. Good muram metal is not available in these 10 miles, and it is on this account that the metalling of the section from Dondaicha to Ranála has been sanctioned. The estimated cost is Rs. 32,921, and the expenditure during the year was Rs. 2,184.

177. *Sakri-Pimpalner road.*—The metalling of portions of this road was in progress, and Rs. 202 spent during the year, against the estimate of Rs. 21,999.

178. *Jalgaon-Jámner road.*—The Neri-Ajanta road, commenced this year, meets the Jalgaon-Jámner road at Neri, which is 14 miles from Jalgaon, and 8 miles from Jámner. The Neri-Jámner road is also being improved, and the metalling of the road from Jalgaon to Neri has become necessary, so as to afford a good made road for the additional traffic that may pass hereafter. The amount of the estimate is Rs. 41,458, and the expenditure during the year has been Rs. 50.

179. *Road from Neri to Jámner.*—This road was originally constructed by the Táluka Local Board, and has been transferred to this department for maintenance. An estimate for improving it, amounting to Rs. 9,104, has been sanctioned, and Rs. 2,316 expended during the year.

180. *Roads in the Dángs.*—The Jakriabari Ghát road work was continued until June 1893, and had then to be closed during the rains; it was resumed in December 1893, and considering the labour difficulties and the short working season, the progress has been very satisfactory. Seven drains have been completed, with the exception of rock cutting in a few places; nearly one mile of the road is ready for consolidation, and another to receive the ballast. The estimate is Rs. 32,702, and the expenditure during the year has been Rs. 14,892.

181. *Neri-Ajanta road.*—This road will bring the northernmost portion of His Highness the Nizám's territory in direct communication with the G. I. P. Railway at Jalgaon, from which place to Neri a made road already exists, and it will also tap the western half of the Jámner Táluka; it will, with its continuation to Jalgaon, in fact, be the first made road to the east of the railway line in the Khándesh District. The length of this road in British limits is 17·14 miles, and 3·34 miles beyond this, in the Nizám's territory, are the Ajanta caves. A minor advantage which the road will confer on the public, is the easy route it offers to the famous Ajanta caves, instead of the very rough and difficult country track, about 30 miles in length, from Páchora Railway Station. The road crosses about 62 nálas, rivers, and streams of various sizes. Of these it is designed to cross 4 with road dams, where the bed is rock—and raising the bed of nálas is good for irrigation—32 small ones are diverted, 15 will have slab drains of various openings according to drainage areas, 10 will have culverts from 3 to 8 ft. span and 1 level crossing in sandy bed. The important features of the line are crossings to the Wághur river, which runs very zigzag, in three places, *viz.*, (*a*) near the town of Neri, (*b*) near the village of Pahur, 10 miles further on, and (*c*) on the village boundary of Wakar, $6\frac{1}{2}$ miles further on. The line is taken on the west of the town of Neri to secure a good crossing with a road dam, the bed at this place being rock; a road dam raises the water level for irrigation purposes, and, by so doing, bágáit land on the east of the town is avoided; hence it hugs one side of a cart-track and mostly goes along a ridge; it deviates from the cart-track near the village of Paldhi to secure a good and fordable crossing; the line skirts the village and again joins the cart-track near the village of Pahur; the line again leaves the cart-track to secure a good crossing over the river Wághur, and then leaves the cart-track and goes in an almost straight line along a ridge. Up to the end of the year Rs. 3,208 were spent on earth-work, and Rs. 57 on masonry works. The estimate is Rs. 95,890, and the expenditure during the year has been Rs. 3,265.

182. *Road from Dondaicha to Sháhála.*—This road has been completed and opened for traffic, except the Bhendwa nála, for the level crossing on which materials are being collected. The sanctioned estimate is Rs. 1,17,583, and the expenditure during the year has been Rs. 4,865.

183. *Road from Dhulia to Amalner.*—As anticipated in the last report, both the sections of this road were completed during the rains, and opened for traffic in the cold season. The total cost to the end of the year is Rs. 48,517, against the estimate of Rs. 52,955, the expenditure during the year being Rs. 7,661. This road connects Amalner with Dhulia, and its continuation to join on with the Dharangaon-Chopda road *viâ* Patonda is in progress, and will connect Chopda with Dhulia.

184. *Dhulia-Mhasvad road.*—Between Dhulia and Mhasvad (a distance of 24 miles), the want of an inspection bungalow, midway, was long felt by all the District officers, and particularly by the officers of the Public Works Department. To supply this want this bungalow is being built at Mukti, 11 miles from Dhulia; the progress has been satisfactory, and the bungalow is expected to be ready for occupation by the end of July. The estimate is Rs. 3,552, and the expenditure has been Rs. 1,931.

185. **Belgaum District.**—*Road from Nipáni to Mahálingpur (Provincial).*—The fourth section of this road has been completed, and only a part of the compensation for land taken up remains to be paid. The sanctioned estimate amounts to Rs. 3,54,632, and the total outlay to the close of the year to Rs. 3,10,759.

186. *Road from Gokák to Navalgund, 45 miles (Provincial).*—The whole road has been completed and opened for traffic. The total outlay is Rs. 4,03,985, against the revised estimate of Rs. 4,05,165.

187. *Road from Sankeshvar to Hukeri, 8 miles (Local).*—This road has been wholly completed. The total outlay amounts to Rs. 19,940, against the estimate of Rs. 19,969.

188. *Road from Manoli to Saundatti, 6¼ miles (Local).*—This road has also been completed. During the year guard-stones have been fixed to protect the traffic on the steep incline of the ghát. The total outlay was Rs. 31,462, against the estimate of Rs. 31,489.

189. *Road from Saundatti to Dhárwár, 11½ miles (Local).*—Muram was spread and consolidated in the remaining miles of the road, and metalled crossings Nos. 4 and 11 were finished. The whole road has been completed and opened for traffic. The total outlay to the end of the year was Rs. 47,599, against the estimate of Rs. 47,882.

190. *Road from Dhupdal Station to Gokák, 3¼ miles (Local).*—This road is bridged and drained. The road to its junction with the old Mill road was completed before the working season; very little work now remains to be done, and this will be completed during the next rainy season. The total outlay to the end of the year was Rs. 24,008, against the estimate of Rs. 26,397. It is proposed to extend this road to join the Gokák-Navalgund road on the east of Gokák town; when this is completed, communication between Gokák Táluka to the south of the river Ghatprabha, and the railway, will be secured during all seasons of the year; at present great difficulty is experienced in crossing the river Ghatprabha during the rainy season.

191. *Improving the road from Kurbet to Yádvad (Local).*—This work was commenced as a famine relief work early in 1892-93; and provision for payment for land compensation only was made during the year. The outlay was Rs. 25,474, against the estimate of Rs. 24,776.

192. *Road from Kágvad to Kempvad and on to Athni (Local).*—This road also was commenced as a famine relief work in 1892-93. The line of road has been pegged out for a distance of six miles, and stones for demarcation have been collected and are being dressed. The total outlay was Rs. 6,045, against the estimate of Rs. 2,11,895.

193. *Road from Kudchi to Terdal (Local).*—The work of embankment, causeways Nos. 1 and 2, and slab drain No. 2, was in progress. The schedule of land required is under preparation, and, as soon as it is completed, the remaining works will be taken in hand. The total outlay during the year was Rs. 1,915, against the estimate of Rs. 66,850.

194. **Dha'rwa'r District.**—*Hubli-Sholápur road, between Navalgund and Nargund (Provincial).*—The work of slab drains on this road was in progress during the year. Seven drains have been completed, leaving seven to be yet finished. The outlay during the year was Rs. 7,695, against the estimate of Rs. 12,415.

195. *Hubli-Sholápur road between Nargund and Konur* (*Provincial*).—The work of constructing slab drains on this road was in progress, and out of 12 drains, 9 have been completed; the expenditure during the year being Rs. 7,303, against the estimate of Rs. 11,255.

196. **Bija'pur District.**—*Road from Kerur to Katgeri, 9 miles* (*Local*).—This road, which was commenced as a famine relief work during 1891-92, was in progress. Dips have been built on all the nálas, except one, which is bridged. The formation of the road is still in progress. The total outlay to the end of the year was Rs. 24,640, against the estimate of Rs. 30,963.

197. *Road from Bijápur to Sindgi, 35 miles* (*Local*).—Some of the masonry works, and the inspection bungalow at Sindgi, which were in progress during 1892-93, were completed. The work of improvements of this road is now stopped for want of funds. The total outlay to the end of the year was Rs. 39,629, against the estimate of Rs. 2,14,546.

198. *Road from Hungund to Ilkal, 8 miles* (*Local*).—This road was in progress; it is completed, except collecting and spreading metal and muram, and rolling, which are partly done. The outlay to date was Rs. 22,421, against the estimate of Rs. 26,228.

199. *Road from Bijápur to Indi, 30 miles* (*Local*).—Improvements to this road, which were in progress during the last year, were completed at a total cost of Rs. 3,145, against the estimate of Rs. 3,147.

200. **Ka'nara District.**—*Road from the Mysore Frontier near Talguppa to Gersappa* (*Provincial*).—32,157 cubic feet of granite and iron stone metal, and 4,848 cubic feet of laterite metal, were collected during the year, and the remaining portion of 9 miles and 3,660 feet metalled and rolled. The work is practically completed, with the exception of some petty items, such as widening the road, fixing guard-stones, &c. The outlay to the end of the year was Rs. 34,554, against the estimate of Rs. 37,507.

201. *Road from the Mysore Frontier near Talguppa to Gersappa* (*Provincial*).—The work of metalling the remaining $9\frac{7}{8}$ miles of this road was put in hand during the year, and 56,441 cubic feet of granite and iron stone metal, and 110,960 cubic feet of laterite metal, collected. The outlay during the year was Rs. 6,533, against the estimate of Rs. 25,035.

202. *South Kánara Frontier road* (*Local*).—The work of constructing the bridge over the Managi Nála, in mile 68, was commenced during the year, the outlay being Rs. 1,452 for collecting materials, and filling in foundations, against the estimate of Rs. 2,584.

203. **Ratna'giri District.**—*Road from Poládpur to Hathkambe* (*Provincial*).—A crossing across the Wáshisti Creek, near Chiplún, on this road, described in the last year's report, was nearly completed during the year, the total outlay being Rs. 6,247, against the estimate of Rs. 6,320. A little work only at one of the approaches, for which the land has not yet been obtained, remains to be done.

204. *Road from Chiplún to Guhágar, 27 miles* (*Local*).—This road, in progress last year, was completed during the year at a total outlay of Rs. 20,163, against the estimate of Rs. 20,606.

205. *Pen-Panvel road from Kallikhind to Palaspe, $5\frac{3}{4}$ miles* (*Local*).—This road was in progress last year. Earth-work in the second section from top of ghát to southern end, as well as masonry drains, retaining walls, and paved fords were completed during the year. Muram was also spread over the road to make it ready for cart traffic. On the first section from Palaspe to Chinchwan, 4 miles, some embankment has been done, 20 masonry drains and 2 large culverts have been nearly completed, and muram to cover 3 miles of road collected. The outlay to the end of the year was Rs. 26,847, against the estimate of Rs. 60,094.

206. **Shika'rpur Canals District.**—The Rajibwah Bridge (Local), as described in the last report, was completed at a total cost of Rs. 4,590.

207. **Gha'r Canals District.**—A bridge over the Shah Amir, as described in the last report, was completed during the year, at a total cost of Rs. 3,485, against the estimate of Rs. 3,534.

208. Five small bridges over Zamindári kariahs on the Khairo Ghari-Shahdádpur road, described in the last report, were completed at a total cost of Rs. 2,753, against the estimate of Rs. 2,819. Three other bridges over Zamindári kariahs on the same road were commenced and completed during the year, at a total cost of Rs. 1,662, against the estimate of Rs. 1,733.

III.—DISTRICT ROADS NOT RAISED.

209. **Surat and Broach District.**—A bridge over the Dockmarda Nála, on the Bajipura-Bárdoli road (Local), described in the last report, has been completed at a total cost of Rs. 3,054, against the sanctioned estimate of Rs. 3,062, Rs. 1,340 being expended during the year.

210. *Reconstructing the Un bridge in Jaldlpor Taluka (Local).*—The old bridge, which was of the type known as Sedley's patent, built some twenty years ago, by the Local Fund Department, was damaged by the floods of 1891, and rendered unsafe for traffic; a new bridge is now being constructed, having three spans of 35 feet, with masonry piers and abutments, and timber roadway, supported on rolled steel girders. The bridge has been completed, with the exception of the roadway, which is in progress. The sanctioned estimate amounts to Rs. 9,305, of which Rs. 8,770 were expended during the year.

211. **Kha'ndesh District.**—*Improving the road from Chálisgaon to Waghli.*—The improvements begun last year were completed during the year, at a total outlay of Rs. 2,949, against the estimate of Rs. 3,062.

212. **Shola'pur District.**—*Improving road from Sholápur to Bársi.*—The length of this road is 42 miles, of which 15 miles of the Sholápur section, and 12 miles of the Bársi section, have been improved by providing muram, and consolidating the same. This road was in charge of the District Local Board, and being in a very bad condition, portions were transferred to this department for improvement. The amount of the estimate is Rs. 14,307, and the total outlay has been Rs. 8,841.

213. *Improving road from Mohol Station to Pandharpur.*—The length of this road is 24 miles, of which about 22 miles have been improved, and the remaining 2 miles are partially improved, and will be completed when funds are granted. The amount of the estimate is Rs. 8,396, and the total outlay Rs. 7,431, of which Rs. 5,031 were spent during the year.

214. *Road from Temburni to Málsiras (portion between Sangam and Akluz).*—The length of this portion is 10 miles, which has been improved by providing muram and consolidating the same. The road has been brought to its original section. The sanctioned estimate is Rs. 7,972, the expenditure during the year Rs. 2,622, and the total Rs. 7,618.

215. *Road from Akalkot to Honur in the Akalkot State.*—This road has been improved, as described in the last report, and handed over to the State; the length of the road is 10·38 miles. The contractor's claim for increased rate was settled during the year and final payment made to him. The amount of estimate is Rs. 39,491, the outlay of the year Rs. 1,877, and the total outlay Rs. 27,243.

216. *Road from Sangvi to Wagdari in the Akalkot State.*—The length of this road is 8·175 miles, which has been thoroughly improved, as described in the last report; only minor works, where the road was damaged, have been done during the year, and the road handed over to the State. The amount of the sanctioned estimate is Rs. 26,658, the outlay of the year Rs. 1,261, and the total outlay Rs. 19,708.

IV.—VILLAGE CLEARED ROADS.

217. **Western Na'ra District.**—*Bridge over the Western Núra at Wategee, on Dádú-Johi road (Local).*—The bridge consists of three spans of 25 feet each, height to springing 12′, and width of roadway 16′. The work is in progress, and the outlay of the year was Rs. 3,548.

218. A bridge over Kolab Sial, on the Mondir and Malik Ferry road, consisting of two spans, 12′ each, and roadway 11 feet, was completed during the year at a cost of Rs. 1,038.

219. Materials to the extent of Rs. 434 were collected during the year for constructing a bridge over the Wahundriwah, on the road from Pat to Sita road. The bridge consists of one opening, 8′ span, and 10 feet height to springing, and 15 feet roadway. The work could not be completed on account of water in the canal, which was required for cultivation.

220. A bridge, consisting of one span of 12′, and 2 feet above the highest water level of 1890, and 11 feet roadway, on the Wadhuwah, on the Dádú-Lalum Ferry road, was commenced and completed at a cost of Rs. 784.

221. **Bega'ri Canals District.**—The four bridges, described in the previous year's report, were completed during the year at a total cost of Rs. 1,742. Seven more were commenced during the year, of which six were completed, *viz.*, two on the Dodápur road, each of 12 feet roadway, 5 feet span, and 3′ 5″ height to springing, total outlay Rs. 762; a third on the Thul and Ghári Rahimdád road, of 12 feet roadway, 5′ span, and 2′ 5″ height to springing, cost Rs. 269; and three more on the Dodápur and Ghári Yásin road over kariahs. The roadway of these in each case was 12 feet, the spans were, two of 8′, and one of 5′, while the height to springing was 5′, 4′ and 3′ 9″. These were completed at a cost of Rs. 569, Rs. 499, and Rs. 933, respectively. The seventh on the Maneadad-Dodápur road was commenced during the year, roadway 12 feet, span 12 feet, and height to springing 6′. The outlay was Rs. 192, against the estimate of Rs. 869.

222. **Eastern Na'ra District.**—The only major work carried out during the year was the work of widening the spoil banks of the Mitrao Canal in the Eastern Nára District, noticed in last year's report as commenced on behalf of the Thar and Párkar Local Board, on which an additional expenditure of Rs. 333 was incurred, raising the total expenditure to Rs. 10,243, against the estimate of Rs. 10,113.

SURVEYS.

223. In the Ahmednagar District the survey for lining out the road to connect the Jámgaon-Kotul with the Thugaon-Kotul road, on the north side of the Mula river, was made at a cost of Rs. 46.

224. In the Násik District a survey for deviation of the Sawalghát, on the Násik-Bulsár road (Provincial), was in progress. The expenditure during the year was incurred in running trial lines at the steepest parts of the Ghát section, with the view of ascertaining whether an easier line did not exist on the other side of the spur along which the line is carried. The deviation is required because along the existing alignment there is a fall of 600 feet in a mile from above ghát to its foot, and, consequently, very steep gradients, of which the maximum is 1 foot in $6\frac{1}{2}$, are unavoidable. The diversion, $3\frac{7}{8}$ miles long, and about $\frac{1}{2}$ mile to the north, will allow the road to be carried down a spur 2 miles long, and to be made with a ruling gradient of 1 in 20. The local authorities have reported that a second toll ought not to be put on the Násik-Bulsár road, which is $38\frac{1}{2}$ miles long, until the work is carried out. An estimate amounting to Rs. 32,521, or Rs. 8,400 per mile, has been prepared. The expenditure during the year has been Rs. 24, from the allotment of Rs. 49, the total expenditure being Rs. 478, against the estimate of Rs. 503.

225. A survey for a road from Ghoti to Devgaon (Local) was in progress. This survey was nearly completed in 1892-93, and plans and estimate were prepared and forwarded in November 1893. The estimate amounts to Rs.

1,14,699, and the length of proposed road is 18⅔ miles, giving a cost per mile of Rs. 6,242; this includes all masonry drainage works. The country traversed was exceedingly broken, two mountain ranges had to be got over, and many large nálas crossed. The total expenditure has been Rs. 827, against the estimate of Rs. 852.

226. The survey for a road from the Násik-Bulsár road to Nánásighát (Local) was completed, and plans and estimate prepared, but not submitted. The survey was 8½ miles long, and follows the ridge of the ghát the whole way, and only one slab drain will be required. There are no steep gradients. The new piece of road is required to connect the recently constructed Nánásighát road, traversing the north of the Peint Táluka, with Násik, *viâ* the Násik-Bulsár road. The expenditure was Rs. 82, and the estimate Rs. 416.

227. The survey for a line of road from Peint to Nánási *viâ* Jagmodi (Local) was in progress. The total length of this survey is about 14 miles; it commences at Peint, which is built on a high ridge, crosses a deep and narrow valley, and at the 3rd mile is again on the top of a high spur; from the ghâts it then again descends steadily to the 7th mile, whence it rises gradually to the high spur over which the Nánási-Barhe road is carried. A survey has also been made by which the first valley can be avoided. About 11 miles of the road have been partly made at different times. The expenditure has been Rs. 401, against the estimate of Rs. 662.

228. In the Khándesh District the survey of the Kalundra Ghát has been completed, and the project is being matured.

229. As the Jakriábári ghát road is nearing its completion, the joining of the road with the Sakri-Pimpalner road is expedient, and the survey was commenced for the road from Jakriábári to Warsa (4¾ miles, from Jakriábári on the west, and 14 miles from Pimpalner on the east), and had made good progress before the close of the year.

230. The Ráisingpur road survey was in progress. This survey is undertaken to connect the Mevás States of Káthi, Ráisingpur, Gangtha, and Ságbára, with Taloda in Khándesh, and the line of road now surveyed, if continued through the territory of the Ságbára State, would join on through Rájpipla to Anklesvar in the Broach District, to afford a through road on the north of the Tápti. The future possible extension of this road in Khándesh itself would be from Taloda eastwards to Sháháda, Shirpur, Chopda, Yával, Sávda, &c. The present survey takes the line of road from Taloda in a direct route towards Ságbára, and ends at the common boundary of the Ságbára and Ráising States, on the western frontiers of Ráisingpur. The line passes near Ráisingpur, to which a branch is taken, ¾ mile in length. The survey, begun last year, was completed during the year, and has been all plotted, and the project is being matured for submission. The estimate was Rs. 3,945, and the expenditure has been Rs. 1,373.

231. Plans and estimates for a road from Amalner to Párola were sanctioned, but the line then selected was aligned so as to avoid the then proposed Bhokar tank. The project for the tank has, however, been since abandoned, and it is now, therefore, proposed to choose a direct route. A fresh survey for a direct line has been made, and the plans and estimates are being matured for submission.

232. In the Belgaum District the survey of the road from Dhupdal station to the Gokák town (Local) was completed during the year; this comprises a ghát incline: and the survey of the road from Pádsháhpur Railway station to Yamkanmardi *viâ* Wantmuri (Local) was in progress.

233. In the Sátára District surveys of the Varanda Ghát-Dharampuri and Karad-Sálva Provincial roads have been completed at a cost of Rs. 320 and Rs. 225, respectively; also for the approaches to the proposed ferry boat on the Takari-Islámpur road, across the Krishna river at Takari, and the Sátára-Kás road, for Rs. 27 and Rs. 193, respectively, on behalf of the Local Funds; and the survey of the road from Ashta to Ashta road station was in progress, the outlay being Rs. 29, against the estimate of Rs. 225.

VI.—ACCOMMODATION FOR TRAVELLERS.

234. **Dha'rwa'r District.**—The accounts of the work of constructing a dharmshála at Dhumvad, táluka Kalghatgi, which was completed last year, were closed this year, the total outlay being Rs. 3,005, against the estimate of Rs. 3,325.

235. **Sa'ta'ra District.**—Additions and alterations to the travellers' bungalow at Ambenalla were carried out during the year at an outlay of Rs. 2,808, against the estimate of Rs. 2,975.

236. **Gha'r Canals District.**—The district bungalow at Warah, described in the previous year's report, was completed this year at a total cost of Rs. 3,722, against the estimate of Rs. 3,733, the expenditure during the year being Rs. 317.

237. **Western Na'ra District.**—The roof of the musáfarkhána at Mehar having become dangerous, it had to be removed, and the work of renewing it is in progress, the outlay during the year being Rs. 2,531, against an estimated cost of Rs. 3,154.

238. **Fuleli Canals District.**—The staging bungalow at Dandhi having been found to be beyond repairs, a new one, to replace it, was proposed to be built at Dádú. The work was given out on contract, and was actually started, when it was stopped, as its construction from Local funds was objected to. The estimate for the work was Rs. 2,787, and Rs. 117 were expended in compensation to the contractors and advertisement charges. The question is pending.

VII.—ARBORICULTURE.

239. **Tha'na District.**—On the Provincial roads in this district the number of trees planted during the year was 1,122. In the numbers given for previous years, trees were counted individually, though several were in the same hole. Some of these have been thinned out, and others counted as one tree only; the total number of trees is thus reduced from 15,726 to 14,974. On the Local Fund roads the number of trees planted during the year was 2,404; of these 1,590 died, and the total number of growing trees has been increased from 21,784 to 22,598.

240. **Surat and Broach District.**—The road-side trees of the following three roads have been maintained from Provincial grants:—

1. Road from Párdi to Chival.
2. Do. Daman to Vápi.
3. Cantonment roads at Surat.

160 new trees have been planted on the Párdi-Chival road, 50 on the Daman-Vápi road, and 111 on the Cantonment roads during the year; and 61 trees on the Párdi-Chival road, 22 on the Daman-Vápi road, and 66 on the Cantonment roads have died during the year. There are no nurseries maintained in this district.

241. **Kaira District.**—Two nurseries were maintained at Kaira and Vásna in the Kaira Sub-division, at a cost of Rs. 60 for each. The total number of trees transplanted during the year from these nurseries were 469, as shown below:—

97	Kaira and Mehmadabad road.
140	Nadiád-Vásna road.
122	Kaira and Sábarmati road.
38	Barejdi and Naika road.
72	Nadiád-Kapadvanj road.
469	

In other sub-divisions no nurseries were maintained, but seeds were sown on the road sides.

On the Petlád-Cambay road (British portion) 1,250 trees were planted and watered, and their fences repaired at a total cost of Rs. 440: out of these 100 have died during the year.

The following statement shows the number of trees on each road at the end of the year :—

	Opening Balance.	Planted during 1893-94.		Total Receipts.	Died during 1893-94.	Closing Balance.
		Young Trees.	Cuttings.			
Provincial.						
Road from Kapadvanj to Bibipura, including Ladwel Branch.	16,076	506	6	16,588	884	15,704
Incorporated Local Funds.						
Road from Kaira to. Mehmadabad	3,637	97	...	3,734	119	3,615
Do. from Sábarmati river ...	8,932	122	44	9,098	725	8,373
Do. from Nadiád to Vásna ...	8,036	140	...	8,176	251	7,925
Do. from Barejdi Railway station to Naika ...	6,257	38	346	6,641	162	6,479
Do. from Nadiád to Kapadvanj.	7,179	461	167	7,807	202	7,605
Do. from Dákor to do. ...	7,610	71	...	7,681	78	7,603
Do. from Páli to Bálásinor ...	2,212	...	...	2,212	8	2,204
Do. from Wásad to Borsad ...	2,353	117	89	2,559	131	2,428
Do. from Petlád to Cambay (British portion)	2,518	1,244	6	3,768	107	3,661

The difference between the closing balance of the last year's statement, and the opening balance of this statement, is due to the bábul trees not having been accounted for in the last year.

Road-side trees in the Panch Mahál are in charge of the Civil Department.

242. **Ahmedabad District.**—Road-side trees have been planted and watered as under :—

	No. of trees.
Modása-Bibipura road	1,558
Hánsot-Dhansura road	687
Ahmedabad-Hursol road	1,032
Extra Municipal road, Ahmedabad	265
Foot of overbridge approach near Kálupur to Camp Ahmedabad road.	

243. **Ahmednagar District.**—The trees on the Provincial roads in this district were maintained during the year ; 67 young trees were planted out on the Paithan road, 195 on the Násik-Poona road, 37 on the Nagar-Dhond road, 43 on the Nagar-Málegaon road, and 76 on the Nagar-Sirur road. The expenditure during the year was as follows :—

	Rs.
Ahmednagar-Paithan road	269
Do. Sirúr road	44
Do. Málegaon road	190
Násik-Poona road	220
Ahmednagar-Dhond road	198

244. **Poona District.**—The road-side trees along the Provincial roads in this district have been properly maintained during the year. New trees have also been planted along the Bombay Mail road in miles 13, 14 and 15. The total expenditure has been Rs. 2, 233.

245. **Shola'pur District.**—Nurseries at the following places were maintained for plants required for road-side trees :—

Temburni.
Shetphal.
Sholápur.
Bársi town.
Bársi road station.

The following numbers of trees on Provincial roads have been watered and preserved, and the fences repaired :—

	No. of trees.
Poona-Hyderabad road, Section I	... 3,753
Do. do. Section II	... 1,243
Do. do. Section III	... 1,497
Sholápur-Takli road	... 8,213
Cantonment roads	... 312
Bársi station-Bársi town road	... 10,103
Bársi-Yedsi road	... 1,549
Yedsi-Tadvála road	... 1,432
Kuslumb-Yermala road	... 140

New plantation was made as follows :—200 plants were transplanted on the Poona-Hyderabad road, Section II, from the Sholápur nursery, and 270 on Section I of the same road from the Shetphal nursery. The total expenditure has been Rs. 1,520.

246. **Na'sik District.**—The following statement gives particulars as to the planting and maintenance of Provincial road-side trees during the year :—

No.	Roads.	Number of trees planted.		Number of trees preserved and watered.	
		No.	Cost.	No.	Cost.
			Rs.		Rs.
1	Bombay-Agra road—				
	(1) Pimpalgaon side	76	22	2,154	111
	(2) Kasára side	122	40	2,553	127
	(3) Pimpalgaon to Rahudghát ...	100	50	300	74
2	Násik-Poona road	87	15	988	89
3	Násik-Balsád road	...	...	1,200	150
4	Manmád-Kopargaon road	50	25	300	75
5	Nándgaon-Aurangabad road ...	25	13	200	47
	Total ...	460	165	7,695	673

The trees on the Local Fund roads are in charge of the Civil authorities.

247. **Kha'ndesh District.**—The young trees on the Provincial lines of road have been fenced and watered where necessary. Nurseries have been established and maintained at Málegaon, Arvi, Dhulia, Nardhana, and Shirpur on the Bombay and Agra road ; at Sakri and Ner on the Dhulia-Surat road, and at Chálisgaon for the Dhulia and Chálisgaon road. The endeavours made to stop the damage from white ants by digging up the nests, and destroying the queen ants, has not been as successful as was anticipated; fresh nests arise, and it becomes a costly affair to cope with them. Cuttings from the banian and pimpri trees were planted, and in many places nearly 50 per cent. took root and thrived well during the rains, and have lived where they are watered, but where they have not been watered, they have withered away. If cuttings are judiciously made and planted early after the rains begin, and watered for a year or two regularly, a number of trees can be reared without maintaining a nursery, and this will be tried next year. The statement of trees and cuttings planted and surviving is subjoined :—

	Trees and cuttings planted.	Died.	Survived.
Bombay and Agra road	382	137	245
Málegaon-Manmád road	247	73	174
Dhulia-Surat road	125	30	95
Dhulia-Chálisgaon road	350	132	218
Roads connecting Government buildings at Bhusával .	58	34	24
Total ...	1,162	406	756

The expenditure during the year has been Rs. 3,360.

248. **Belgaum District.**—In this district 50 young trees were planted on the Belgaum-Korkop road, and 12 on the Dudhganga to the Málprabha river road. Twenty trees on Belgaum-Korkop road died during the year. A nursery is maintained in mile No. 9 of the Gokák-Navalgund road from Local Funds, where 700 young plants have been reared. The existing trees were maintained on the following roads from the Provincial grant :—

1. Road from Poona to Bangalore, section from the Dudhganga to the Málprabha river.
2. Road from Belgaum to Bágalkot, section from Belgaum to Korkop.
3. Road from Belgaum to Vengurla, section from Belgaum to Ámboli.
4. Road from Belgaum to Kárwár, section from Belgaum to Shitawde.
5. Road from Khánápur to Yellápur, section from Khánápur to Linganmath.

249. **Dha'rwa'r District.**—In this district the existing trees along the sides of the undermentioned roads were efficiently maintained during the year, at a cost of Rs. 1,538 ;—

		Expenditure.
		Rs.
1.	Poona-Bangalore road	648
2.	Havanur-Yakambi road	270
3.	Hubli-Gadag road	126
4.	Hubli-Sholápur road	169
5.	Dhárwár-Tinaighát road	109
6.	Hubli-Sangtikop road (section of Kárwár-Bellary road) ...	50
7.	Tadas-Wadgatti road	19
8.	Dhárwár railway station road	5
9.	Gadag-Hesrur road (section of Kárwár-Bellary road) ...	142
	Total ...	1,538

250. **Sa'ta'ra District.**—In this district the expenditure incurred on maintenance, &c., of road-side trees was as follows :—

		Expenditure.
		Rs.
1.	Poona-Bangalore road portion from Nira river to Warna river.	194
2.	Karád-Kumbharli road	30
3.	Surat-Mahábaleshvar road...	155
4.	Karád-Nagaz road	65
5.	Sátára-Shendra road	8

251. **Bija'pur District.**—In this district the total expenditure under this head on watering and fencing road-side trees was Rs. 640, and on maintaining a nursery Rs. 98. The following are the roads on which trees were maintained :—

1. Road from the river Bhima near Takli to the Málprabha near Konnur.
2. Road from Kajidoni to Bágalkot.
3. Road from Bijápur to Honvad.

252. **Ka'nara District.**—In this district young trees previously planted, and nurseries already established, were maintained on the following Provincial lines of roads, and the expenditure during the year was Rs. 659 :—

1. Road from Sangtikop to Kárwár *viâ* Arbail Ghát.
2. Road from Yellápur to Bankápur *viâ* Mundgod.
3. Road from Dhárwár frontier to Kumta *viâ* Sirsi.
4. Road from Yekambi to Samasgi.
5. Road from Gersappa to Falls and Talguppa.

253. **Ratna'giri and Kola'ba Districts.**—During the year no new road-side trees were planted in either of these districts, but the existing ones were maintained by watering and fencing at a cost shown below :—

	Rs.
Ratnágiri Collectorate	1,291
Kolába Collectorate	1,101

III.—MISCELLANEOUS PUBLIC IMPROVEMENTS.

254. The outlay under this head was Rs. 3,64,215, sub-divided as follows:—

	Rs.
Original Works	2,53,929
Repairs	47,532
Establishment	57,813
Tools and Plant...	4,940
	3,64,214

And the works carried out were as follows:—

III.—PAVING AND STREETS.

255. *Bombay.*—The roads on the Esplanade, Bombay, described in the last report, have been completed and handed over to the Municipality. Rs. 10,129 were expended during the year, and Rs. 15,390 from the commencement of the work, against the sanctioned estimate of Rs. 16,218.

256. *Kárwár.*—The work of extension of the sea wall of the Koney sea slope road at Kárwár, in progress last year, has been completed during the year at a total cost of Rs. 7,911, against the estimated amount of Rs. 7,625.

257. *Kanjeri.*—An estimate, amounting to Rs. 2,783, was sanctioned for the improvement of the streets in the village of Kanjeri (a native State managed by the Collector of the Panch Maháls), where the ground is, owing to springs, much like quicksand, which occasions the loss of cattle, and is generally a great nuisance. About Rs. 800 were expended in the collection of material, but the manner of dealing with the evil being now considered unsatisfactory, the work has been suspended pending further survey and consideration.

V.—WATER-SUPPLY.

258. *Surat.*—The experimental well at the proposed head works of the Surat Water works at Varacha, described in the last report, was sunk to a depth of 20 feet below the summer level of water in the Tápti, but the water, on being analysed, was found to be unfit for drinking purposes; another site for the head works has since been proposed, about a mile and a half below the first site, but its final adoption depends upon the results of the analyses of the waters obtained at spring tides up to June 1894, from a 3 feet diameter well sunk in the bed of the river. The samples sent hitherto have proved favourable, and if the remaining samples are likewise found potable, the question of the site for, and the nature of the head works will have been satisfactorily solved, as the river bed at the new site consists of clean sand and gravel to a depth of 18 feet, in which it will be possible to sink supply wells similar to those at Ahmedabad. Rs. 914 were expended during the year, and Rs. 3,601 from the commencement of the work. The sanctioned estimate amounts to Rs. 4,496.

259. *Dákor.*—The Dákor Water-supply project has proceeded as far as the completion of the survey. Trial borings at a fresh site were made in the hot weather. At 20 feet below the river bed something almost of the nature of an artesian spring was tapped, but the water was condemned by the Government Chemical Analyser. It seems probable that due care was not taken in getting the sample, and the boring will, therefore, be repeated before next rains.

260. *Kaira District.*—A number of tank improvements at various places in the Kaira Collectorate were in progress, and others have been under survey during the year. The works comprise the addition of waste weirs, provision of washing ghâts and cattle inclines, repairs to banks and existing works, and the like. A sum of Rs. 9,516 was expended during the year. A number of wells have also been in various stages of progress, and Rs. 5,824 expended from Local Funds, and in the Rewa Kántha States.

261. *Ahmedabad District.*—The improvements to the Ghamph Tank have been nearly completed, a retaining wall with two ghâts has been finished, and only

excavation remains to be done. The expenditure during the year has been Rs. 1,577; and the total expenditure Rs. 3,356, against an estimated cost of Rs. 3,547.

262. *Sholápur District.*—Seven wells were under construction during the year, out of which four have been completed, one suspended, and two are not finished, owing to there being too much water for commencing the masonry work. The work of clearing a village tank at Rahátevádi was also suspended on account of water in the tank. Surveys of six village tanks for Famine Relief purposes were sanctioned, and preliminary surveys of them have been made, but the sites of some of the tanks have been found unsuitable, and fresh sites are to be chosen and surveys made.

263. *Ahmednagar.*—Since the last year's report on the subject of a supply of water to the City of Ahmednagar, nothing of special interest has transpired. Orders on the project were received from Government in March 1894, in which it was decided that special measures for the Cantonment may be deferred; that the valuable works (old aqueducts), in charge of the Municipality, should be properly maintained and improved; and that the result of sinking the proposed well on the bank of the Sina will be awaited. Since then a report has been submitted by the Sanitary Engineer, which shows that an ample supply should be given by a project, properly worked out by a Public Works Department Engineer, for utilizing the existing murum gallery excavations which remain from the ancient aqueducts, in conjunction with the improvement of the present utilized aqueducts; also that the sinking of the well in the Sina will be a waste of money, as the water must be unfit for potable purposes.

264. *Dhulia Water Works.*—The puddle trench of the dam (from 320′ to 360′) in the river-bed was excavated down to rock; the excavation had to be done under water, and the outlay on pumping was Rs. 329. The quantity of excavation carried out for this length of the trench was 8,800 cubic feet, at a cost of Rs. 763. Filling in with puddle in the trench excavated this year, as well as in the part excavated last year (near chainage 100 feet) was done to the extent of 22,800 cubic feet. The sand in the river-bed on the sides of the puddle trench was then removed, and the river-bed so cleared filled with good clay, and the whole raised to the level of the surface of nála-bed and covered with flat stones for protection during the rains: 26,500 cubic feet of sand were thus removed, and 86,600 cubic feet of dam work done for Rs. 412 and Rs. 1,292 respectively, before the rains commenced. During the rains the embankment on the left bank was raised; that on the right bank being already finished last year. As everything else had sufficiently advanced to admit of the commencement of the closure in the river-bed proper, it was begun in December, and the embankment raised to R. L. 1124, *i.e.*, within 18 feet of the top of the dam, at the end of the year. The total work done during the year was 834,000 cubic feet for Rs. 8,583. The pitching on the water side slope of the dam remained in progress, as the embankment was raised, and the total quantity done in the year was 34,892 square feet, at an outlay of Rs. 3,639. In connection with the outlet, the inlet channel was excavated to the proposed bed-level, and the excavation for masonry work finished by January 1894, when the masonry was begun; the work done by the end of the year was 1,757 cubic feet. The most important work is the tunnel, which is 90 feet in length, and 6′ × 6′ in section, roughly. The pipes of the supply main are to pass through it near its top on one side, and it is to serve as a scour channel below. The work was begun in April 1893, and, as the commencement of the closure depended on its completion, it was necessary to finish as early as possible. The small width and height did not admit of employing a number of convicts at one and the same time, and though the work was in progress from both ends, the actual work done in a few days showed the necessity of doing work also at night; the convicts could not be worked at night, and, consequently, free labour was employed from evening to midnight. This procedure proved satisfactory, and the tunnel was finished in December 1893; the work done was 3,348 cubic feet, at a cost of Rs. 1,771. The tunnel is lined with a masonry arch for a length of 15 feet on the tank side. The excavation of the open scour channel beyond was also in progress. All the other materials, such as pipes, valves, fittings, &c., were brought on site of work ready for use. The total expendi-

ture on the outlet was Rs. 3,672. The waste weir was all complete last year; during the year foundations for the wing wall, and for a part of the weir wall, were excavated, and 5,500 cubic feet completed at a cost of Rs. 456. In connection with the supply main, the trench for receiving the pipes was excavated for a length of 29,500 feet, and the pipes supplied by the Municipality were laid over a length of 29,187 feet. The scour, air and shut-off valves, which were also delivered on the site, were laid and fixed in position along with the pipes, at an outlay of Rs. 14,375. As regards the service reservoir, service main, and town distribution, a number of sites for the service reservoir were examined, and finally the site near Boyd's tank was settled. The survey for the service main and town distribution was completed, and revised plans and estimates for the whole project were prepared and submitted for sanction. The labour difficulty, which is a general feature of Khándesh as regards free labour, applies to this work as well, but it was not felt, as a gang of convicts has been working during the year, and was strengthened by an addition of nearly 100 men at the beginning of the closure, and the work has now well advanced to admit of the completion of the head works by July 1894. The amount of the revised estimate is Rs. 4,16,899, the expenditure during the year Rs. 30,581, and the total from the commencement Rs. 1,63,064.

265. *Khándesh District.*—The well at Ajnad, referred to in the last report as completed, was deepened 13 feet during the hot season, by the villagers, with a view to obtain a greater supply of water, and the necessary extension of the steining being sanctioned, the collection of materials was commenced, and Rs. 160 spent during the year, against the estimate of Rs. 1,396. The reconstruction of the Babhla Tank, described in the last report, was completed at a cost of Rs. 2,171, against the estimate of Rs. 2,554, the expenditure during the year being Rs. 1,441; a well at Vikhran, estimated to cost Rs. 2,057, was in progress, and Rs. 290 expended during the year, the total expenditure from commencement being Rs. 529; and a well in the Mámlatdár's Kacheri at Sháháda was practically completed at an outlay of Rs. 812, against the estimate of Rs. 826.

266. *Yeola.*—The plans prepared by the last Sanitary Engineer were received back for revision in November 1893. New sites were selected for cisterns and stand pipes in the town, and surveys made at each; measurements were made of all existing cisterns, and the plan of line of pipes from wells was corrected, and all information required to revise the design was collected; observations of height of water, and draw off by môte for water-supply and irrigation, were continued. The preparation of the plans was, however, delayed, owing to other pressing work. The total expenditure to date has been Rs. 1,701, against the estimate of Rs. 1,953.

267. *Násik.*—A contour survey of the town was made. A meeting took place in February 1894 between the Sanitary Engineer and the Executive Engineer, and a report drawn up by the former, showing what details of the four lákhs scheme might be abandoned or postponed, and how the cost could be reduced by about Rs. 75,000; these officers also met some of the leading members of the Municipality, and explained that the town could not be supplied with a good water-supply and drainage scheme without some slight enhancement of taxation.

268. *Belgaum District.*—The water-supply scheme for Nipáni was undertaken during the year and nearly completed; only some minor works, such as filling in the trench for the pipe line, and putting in concrete at places, remaining to be done. The total outlay during the year was Rs. 9,639, against the estimate of Rs. 9,612.

269. *Dhárwár District.*—Improvements to the drinking water tanks at Ambigeri, Annigeri, Halligudi and Shirguppi (Local) were in progress; the outlay to the end of the year being Rs. 11,069, 400 and 32, against the estimates of Rs. 13,210, Rs. 2,956 and Rs. 3,326, respectively. Improvements to the tank at Rotigwad (Local), in progress last year, were completed at a total outlay of Rs. 2,838, against the estimate of Rs. 2,932.

270. *Hubli Water Works.*—These works, described in previous reports, made excellent progress during the year, and by the 31st March the works were practically completed. The earth-work of the dam at Unkal was completed in

November 1893, and the stone pitching in January 1894; the outlet with all iron work was also completed in September, and the waste weir and all works in connection therewith in October. The tank filled for the first time on 17th October, and had an overflow 1 foot in height over crest of waste weir; the rainfall registered on that day being 2·87 inches as gauged at the dam, the whole falling in about 1½ hour. The laying of the 12″ main piping was completed during the year. The high level service reservoir was completed in October 1893, and the low level service reservoir in March 1894. The engine house and driver's quarters were all completed in December 1893, with the exception of the chimney, which was delayed for want of suitable bricks; these were eventually procured from Mangalore, and the chimney was completed by the end of March 1894. The distribution work, with the exception of one or two small stand-posts, was commenced and completed during the year, in all 9 miles and 1,165 feet of piping having been laid and jointed together with all the necessary sluice, wash-out and air-valves; 34 stand-posts, out of 38 sanctioned, have been put up, the erection of the remaining 4 being delayed owing to disputes and litigation regarding the sites. Water was admitted to some of the mains in the town, as a trial, as early as October 1893, and since the 12th of March has been distributed throughout the town generally by gravitation direct from the storage reservoir, and in this way, owing to the high level of the water in the reservoir (only 2½ feet below full supply level), it has reached all but the two highest stand-posts. The Railway Company also, during the month of March 1894, received a supply of water into their well, which had run dry, and were thus saved the very heavy expenditure that would have been incurred in running water trains to Hubli from the Wardha river, a distance of 42 miles. The engine house chimney having been completed, the engines are now being erected, and it is anticipated that they will be in working order early in May 1894. The works, it is expected, will be completed in all respects, and will be handed over to the Municipality in June 1894. The estimated cost of the work, as originally sanctioned, was, including establishment and tools and plant charges, Rs. 4,73,250. During the year it has been found necessary to submit a revised estimate amounting to Rs. 4,78,770. This estimate is only Rs. 5,520 in excess of the original one, and has been approved of by the Municipality and the Railway Company. The expenditure during the year has been Rs. 94,737, and the total to the end of the year, Rs. 4,65,595, leaving a balance of Rs. 13,175, of which nearly Rs. 10,000 are required for land compensation. The work during the year has been carried out, to a very large extent, by convict labour, free labour having only been employed where absolutely necessary.

271. *Dhárwár Water-supply.*—This project was again under consideration during the year, and three revised projects were prepared and submitted, the revisions being rendered necessary by the requirements of the Sanitary Board. The estimated cost of the project, as finally approved of by Government, amounts to Rs. 4,58,977, including establishment and tools and plant charges, and excluding the cost of auxiliary works. The project now awaits the approval of the Railway Company, the Local Board, and the Municipality of Dhárwár, the three contributors to the work. When the project is sanctioned, and the work started, the main features of the scheme will be detailed in the next report.

272. *Bijápur District.*—Measures for improvements to the water-supply were in progress. The wells at Arkeri and Ukli (Local) were completed at an aggregate outlay of Rs. 6,379; tanks at Tolmatti and Tulsigeri (Local) were in progress, the aggregate outlay to the end of the year being Rs. 555. The work of improving the Sonár Bávdi at Bijápur (Municipal), described in the report for 1891-92, was completed; the total outlay to the end of the year was Rs. 4,182, of which the Municipality of Bijápur contributed Rs. 2,682, and Government Rs. 1,500. The work was undertaken with a view to the provision of an ample supply of water to the town of Bijápur, but the water having, after analysis, been declared by the Chemical Analyser to Government to be unfit for drinking purposes, the project has been abandoned, and another project is now under consideration.

273. *Panvel.*—The water-supply to the town of Panvel, which is derived from a few tanks and wells in and about the town, is deficient in quantity, and inferior in quality, during the hot weather, which seriously affects the health of the

inhabitants. To remedy this state of things, a scheme for bringing water from the perennial springs at Gadeshvar, seven miles away, has been approved, and is now in progress, having been commenced during the last cold weather. These springs were gauged in the hot weather, and were found to give a supply of 108,000 gallons a day, equal to 10·8 gallons per head per day to a population of 10,000. The springs at Gadeshvar, of which there are several, issue from conglomorate beds on the bank of the river. The water is taken straight from the springs, and being of excellent quality, no provision is made for filtering it. The mouths of the springs are surrounded by a masonry enclosure, arched over, forming a collecting well or tunnel, from which the water is taken into the main pipe. From the head works the water is to be conveyed by gravitation to the service reservoir near the town, in a cast iron main, 14,100 yards long, of which the first 4,050 feet are to be 6 inches in diameter, and the remaining 5 inches. The total fall to the service reservoir is 115 feet, and the calculated discharge 115,200 gallons in 24 hours. The service reservoir is to be placed on high ground, a little to the north-east of the town: it will be a rectangular masonry structure above ground level, covered with brick arching and concrete, and will contain 25,000 gallons, or 2½ days' supply. For town distribution four masonry cisterns, placed in convenient parts of the town, are proposed at present only. Each cistern will be of masonry, covered by corrugated galvanized iron, and each will be fitted with 16 cocks for drawing off water. The outlay during the year was Rs. 8,014, against the estimate of Rs. 1,10,831.

VI.—SEWERAGE, INCLUDING DRAINAGE.

274. *Kaira.*—The Nadiád drainage work was commenced during the year. The town lies in a hollow, and in the rains the water cannot get away. The drainage work comprises a cut, about 2½ miles long, to the river Shedi, regulating sluices, and the necessary bridges. The cost of the work is estimated at Rs. 13,406, out of which Rs. 2,100 have been expended. A good start was made on the earthwork, which was given to a contractor, but difficulties in acquiring land interfered with the progress, and at the end of the year the work was practically suspended.

275. *Ahmedabad.*—In 1891, a project was obtained from Mr. Baldwin Latham for sewering a section of about one-tenth of the total area of the city; of this about one-third was carried out, approximately, during 1891-92 and 1892-93. The experiment proved successful, and it is now proposed to carry out the remaining two-thirds of the original project prepared by Mr. Baldwin Latham. The total estimated cost of the portion now proposed to be sewered is Rs. 83,165, exclusive of the cost of the glazed earthenware pipes, which will be supplied by the Municipality, and of the cost of house connections, for which a separate estimate is to be submitted during the year under report; about 1¼ mile of piping have been laid with the necessary manholes, and about 200 house connections made. The sewage farm has an area of 44 bighas, of which some 35 are now under cultivation. The ground has been used more for experimental purposes than anything else, and a variety of crops have been planted, with a view to thoroughly testing the advantages of each crop; during the year under report, sugarcane, tobacco, castor-oil, vegetables, wheat, jowári, guinea grass and hariali grass were planted. Some of these crops were more or less successful, and, on the whole, the experiments are being very honestly and carefully worked out, and it is hoped that, in a year or two, the Municipality will be in a position to determine on the best way of utilizing the sewerage, and to considerably extend the area under cultivation, which is now too small to be utilized most advantageously.

276. *Násik.*—The Sanitary Board were supplied with a contour map of the town, and the Board's report is awaited before further progress in preparing a project can be made.

277. *Bhadgaon and Chopda.*—The town of Bhadgaon was surveyed during the year for a drainage scheme. Maps giving the levels of roads of the towns of Bhadgaon and Chopda were prepared and supplied to the Collector of Khándesh, with preliminary reports regarding the drainage schemes for both these towns.

278. *Hubli.*—A survey of the town, with a view to the preparation of a drainage project, has been made, and the plan submitted to the Sanitary Board, whose instructions on the subject are awaited.

MISCELLANEOUS.

279. *Bombay.*—As the present dry rubble stone pitching from Colába to near the Marine Lines station has suffered a great deal from the action of the sea, it is proposed to strengthen it by means of additional angular dry rubble, and by adding new stone to the portion opposite the Marine Lines station, at an estimated cost of Rs. 1,36,926, out of which Rs. 13,937 was expended during the year. A piece of concrete wall, 40 feet long, has been constructed as an experiment.

280. *Surat.*—The Protective works to exclude floods from the City of Surat from the Tápti River, described in previous reports, were in abeyance pending the final decision of the Municipality as to the location of section No. VI, otherwise called the Gastipura Section. The whole of the sections 1 to 5 and 7 to 10 have been completed at a total cost of Rs. 1,30,700, against the sanctioned estimate of Rs. 1,98,255. Rs. 686 were expended during the year.

281. An estimate, amounting to Rs. 10,819, for constructing two groynes on the right bank of the Tápti River, above Hope Bridge, was sanctioned, and groyne No. 2 was ordered to be proceeded with: it consists of two rows of round teak piles, with brushwood filling between, and is 400 feet long, and placed at an angle of 45° with the bank, at a distance of 1,000 feet from the north abutment of the Hope Bridge. Its object is to prevent the encroachment of the Tápti River on its right bank, which was endangering the safety of the Ránder side approach to the Hope Bridge. The construction of the groyne stopped further encroachment, and a fair amount of silting has taken place below it; Rs. 5,412 were expended during the year.

282. *Bijápur.*—The supplementary programme of clearance of prickly-pear by convicts, described in previous reports, was in progress during the year. It was transferred from the Public Works Department to the Jail Department in December 1893, and since then all further expenditure on it, in the Public Works Department, has been stopped by order of Government. The total outlay to the end of the year was Rs. 2,22,198, against the estimate of Rs. 2,57,873.

APPENDICES (A. TO F.)

TO THE

ADMINISTRATION REPORT OF CIVIL WORKS

FOR THE YEAR

1893-94.

B 371—11

APPENDIX A.

Statement showing the actual Expenditure incurred on the preservation of Buildings of Historical and Architectural interest from 1889-90 to 1893-94.

	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	
Original Works.	Rs.	Rs.	Rs.	Rs.	Rs.	
Compound wall of Ráni Sipri's Mosque, Ahmedabad.	...	1,301	...	...	...	
Alterations to door pivots and sockets and strengthening wall by a cross-wall in Azam Khán's Palace, Ahmedabad	...	...	360	...	...	Used as District Jail.
Masonry steps from the rear terrace of the main Shahi Bag to the Garden, Ahmedabad ...	...	...	463	...	...	Used as private residence by the Commissioner, N. D.
Providing water-supply to the main Shahi Bag, Admedabad	...	...	992	...	...	
Total, Original Works ...	...	1,301	1,815	...	...	
Repairs.						
Repairs to Syed Oosman's Rozah, Ahmedabad ...	887	649	313	...	...	
Do. to Allam Chistri's Mosque near Khánpur Gate, Ahmedabad	185	...	...	...	...	
Replacing the stones in the parapet in the Ráni Sipri's Mosque, Ahmedabad	20	64	...	...	...	
Repairs to the Rozah of Shah Alam, near Ahmedabad..	(a) 2,298	(c) 2	(b) 3,255	(d) 753	(e) 2,231	
Do. to carved windows in the Sidhi Syed's Mosque, Ahmedabad	(c) 113	...	...	...	...	
Barb wire fencing to improve the approach to carved windows in rear of Sidhi Syed's Mosque, Ahmedabad	...	...	82	...	...	
Repairing Mallek Allam's Mosque near Sáhálum, in the Dáni Limda village boundary, Ahmedabad District	...	297	236	...	...	
Repairs to Fateh Mosque, Ahmedabad	...	268	175	...	...	
Clearing and removing seedlings from the Dáda Hari's well, and Mallek Allam's Mosque, Ahmedabad ...	...	43	2	13	...	
Repairs to Báwa Lolli's Masjid, Ahmedabad ...	...	...	1,220	...	...	
Do. to Mahafiz Khán's Mosque, Ahmedabad ...	...	...	159	...	(f) 158	
Improving the state of the Achut Bibi's Mosque, Ahmedabad	...	...	323	...	...	
Azam Khán's Palace, Ahmedabad	581	533	572	831	236	Used as District Jail.
Shahi Bag do.	673	664	672	428	1,797	Used as private residence by the Commissioner, N. D.
Sidhi Syed's Mosque do.	101	106	155	85	75	Used as office of Mámlatdár of Daskrohi.
Ibrahim Syed's Tomb and Mahomed Amikháu's Mosque and Rozah, Ahmedabad	305	468	383	357	236	Used as residence and office of the Executive Engineer, Ahmedabad.
Repairs to Sultan Ahmed's Masjid in Bhadar, Ahmedabad	...	...	...	2,059	318	
Do. to Sidhi Basir's Mosque near the Ahmedabad Railway Station	...	...	...	56	...	
Raising a compound wall and a door to Ráni Sipri's Mosque, Ahmedabad	...	...	...	250	...	
Repairs to Ráni's Mosque at Kocharap near Ahmedabad	...	...	...	299	427	
Do. to Mosque of Mahomed Ghoos Gwaliari or Ektoda Masjid (Sárangpur) in the city, Ahmedabad	...	...	...	271	...	
Do. to step well at Adalaj	...	...	...	37	...	
Do. to the Rozah at Batwa	...	...	...	...	242	
Raising the partition wall to the Ráni Sipri's Mosque to a height of 7 feet, Ahmedabad ...	...	...	...	...	44	
Repairs to Ráni Sipri's Mosque do. ...	...	...	...	...	87	
Do. to Abu Torob's Rozah in Byrámpur village boundary, Survey No. 99, near Ahmedabad ...	...	...	...	...	453	
Carried over ...	5,163	3,094	7,547	5,439	6,304	
	...	1,301	1,815	...	...	

(a) Contribution work, exclusive of establishment. Rs. 276
Tools and Plant. 34
(b) Do. Establishment . 390
Tools and Plant. 49
(c) Contribution work.
(d) Do. exclusive of Establishment . 90
Tools and Plant. 11
(e) Do. Establishment . 267
Tools and Plant. 33
(f) Contribution, exclusive of Establishment ... 66
Tools and Plant. 2

APPENDIX A—*continued.*

	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.
	Rs.	Rs.	Rs.	Rs.	Rs.
Brought forward ...	...	1,301	1,815	...	...
	5,163	3,094	7,547	5,439	6,304
Repairs to Mallek Sarang's Mosque and Tomb (Sarangpur) in the City of Ahmedabad...	...	...	...	...	481
Do. to Bibiji's Mosque at Rájpur Hirpur near Ahmedabad	...	...	...	...	931
Do. to Mallek Shahan's Tomb in Rokhial near Ahmedabad	...	...	...	...	385
Do. to Mallek Sarang's Masjid and Ráni Bibi's Rozah at Sarangpur in the City of Ahmedabad	...	...	...	...	270
Tomb of General Wedderburn, Broach	5	3	6	4	6
„ of Captain Símpee do.					
English, Dutch, and Armenian Cemeteries at Surat ...	404	395	394	355	389
Rozah at Mehmadabad	...	...	...	49	50
Juma Masjid, Chámpáner ...	...	...	...	1,011	1,197
Nawaj do. do. ...	...	...	...	51	...
Wandra do. do. ...	...	...	...	123	27
Rozah in front of do. do. ...	216	298	299	...	23
Rozah near Ptar Tank do. ...	...	...	...	115	45
Gateway to Fort do. ...	...	...	...	25	...
Nagina Masjid do. ...	...	...	...	178	31
Rozah in front of do. do. ...	...	...	...	...	...
Shikundarsha's Rozah, Hálol ...	...	...	...	74	25
Kaira and Panch Mahals Districts.					
Securing the cracked columns in the Elephanta Caves	...	1,061	...	...	...
Maintaining the Caves at Elephanta	1,093	1,464	1,695	1,522	1,608
Current Repairs to Pier and Caves at Elephanta ...					
Do. to Buildings at do. ...					
Special Repairs to the temple at Ambernáth, Thána District	...	13	...	69	...
Repairs to monument at Koregaon, Poona District...	80	216	80	80	50
Do. to Temples at Balsane, Khándesh District ...	...	...	...	...	91
Current repairs to the old Mahomedan buildings at Bijápur	1,476	1,536	1,593	1,433	1,567
Special repairs to Mehter Mahal at Bijápur ...	2,189	212	...	...	...
Repairs to Gol Gumbaz at do. ...	3,872	4,318	1,087	3,238	2,499
Putting broad arrows in old buildings at do. ...	4	...	...	...	...
Compensation paid to the Mujawars of the Gol Gumbaz at Bijápur	...	1,100	...	...	...
Current repairs to Dawal Yákut Mahal at Bijápur ...	110	103	102	97	97
Special repairs do. do. ...	...	...	46	...	...
Repairs to the Ibrahim Rozah at do. ...	...	...	1,569	759	948
Adawlat Mahal (Collector's residence) at do. ...	223	225	219	225	218
Anand Mahal (Assistant Collector's and Judge's residence) at Bijápur	274	653	270	252	268
Arash Mahal (Civil Surgeon's residence) at Bijápur .	150	150	148	146	146
China Mahal (Police Superintendent's residence) at Bijápur	150	160	148	147	160
Portion of Two Sisters (Executive Engineer's residence and office) at Bijápur	549	132	135	135	130
Granary (public offices) at do.	675	674	673	649	669
Musjid near Gol Gumbaz (Travellers' Bungalow) at Bijápur	175	172	155	159	158
Edga (Head Quarters Police Lines) at Bijápur ...	500	449	487	480	458
Serai (District Jail) at do. ...	506	360	290	550	390
Gagan Mahal Gateway (English Church) at do. ...	...	65	42	56	59
An old building in the Arkilla converted into Mámlatdár's Kacheri at Bijápur	110	100	98	98	100
An old building outside the Arkilla converted into High School at Bijápur	140	140	139	229	205
Part of the Granary Quadrangle converted into Agricultural Record Room, Bijápur	40	40	36	35	29
Carried over ...	18,104	17,133	17,258	17,783	20,014
	...	1,301	1,815	...	...

APPENDIX A—*concluded.*

	1889-90.	1890-91.	1891-92.	1892-93.	1893-94.	
	Rs.	Rs.	Rs.	Rs.	Rs.	
Brought forward ...	...	1,301	1,815	...	...	
	18,104	17,133	17,258	17,783	20,014	
Special repairs to the Dome and Masjid of Shah Nawaz Khan at Bijápur	...	...	...	...	1,031	
Preserving the caves at Bádámi, Bijápur District ...	...	48	24	22	24	
Special repairs to do	...	...	...	...	39	
Repairs to the Temple of Shiva at Chavadanpur, Dhárwár District	866	...	...	...	...	Includes Rs. 200 from contribution.
Repairs to the Tomb of Shiwaji on Ráigad Fort, Kolába District	...	...	...	...	25	
Special repairs to the Mosque at Dabhol, Ratnágiri District	...	...	...	2,365	584	
Two Tombs at Hukeri, No. 1 used as a District Bungalow, and No. 2 used as office by Officer occupying the Tomb No. 1, Belgaum District	126	104	31	468*	40	*Includes renewing roof.
New Adawlat Wada at Sátára used as District and Subordinate Judges' Courts, Collector's Record Room, and District Forest Officer's Office ...	1,101	1,096	956	1,046	1,037	
Old Palace, Sátára, used as High School ...	650	672	630	644	649	
Rang Mahal buildings at Sátára	44	44	44	3	...	Sold.
Repairs to General John Jacob's Tomb at Jacobabad.	29	25	21	19	...	
Do. to Miani Monuments near Hyderabad ...	...	...	...	46	52	
Do. to Juma Masjid at Tatta. Contribution towards—	...	...	...	...	2,500	
Total Repairs ...	20,920	19,122	18,964	22,396	25,995	
GRAND TOTAL ...	20,920	20,423	20,779	22,396	25,995	

APPENDIX B.

STATEMENT SHOWING THE OUTLAY INCURRED ON POLICE BUILDINGS DURING THE YEAR 1893-94.

District.	Station.	Nature of Work.	Number of men to be accommodated.	Estimated Cost.	Expended during the year.	Remarks.
				Rs.	Rs.	
Thána ...	Bándra ...	Providing ventilators to the Police lines.	...	92	92	Completed.
Do. ...	Gowalwadi .	Police lines	5	1,607	377	Do.
Do. ...	Thána ...	Drain behind the latrines for the Military and Police lines to carry sewage to low tide limits.	...	275	239	In progress.
Surat ...	Chikhli ...	Police lines	29	11,161	7,752	Do.
Do. ...	Kikarla ...	Do.	4	987	972	Completed.
Do. ...	Hatiawad ...	Do.	4	987	962	Do.
Do. ...	Wapi ...	Lock-up	...	499	463	Do.
Do. ...	Pardi Kaned	Police lines	8	988	932	Do.
Broach ...	Wagra ...	Completing the railing round the Police lines.	...	447	447	Do.
Do. ...	Pakhajan ...	Providing a gate-way to the Police lines.	...	37	37	Do.
Kaira ...	Umreth ...	Police lines	15	4,846	195	Do.
Do. ...	Wadia ...	Do.	10	2,700	1,597	In progress.
Do. ...	Borsad ...	Providing wire netting ventilators in the Police lines.	...	58	64	Completed.
Rewa Kántha..	Pandu ..	Police lines	3	865	539	Do.
Panch Mahals..	Kalol ...	Additions and alterations to the Chief Constable's office-room.	...	56	36	Do.
Do. ...	Jambughora	Providing a window in the office of the Chief Constable.	...	30	26	Do.
Ahmedabad ...	Satlasna ...	Chief Constable's quarters and office ...	1	1,136	742	In progress.
Do. ...	Bhimpura ...	Police lines	4	930	624	Do.
Do. ...	Wakhtapur.	Police lines and Thánadár's Kacheri ...	21	15,751	752	Do.
Do. ...	Ahmedabad.	Laying 1½" pipe in the Magisterial lock-up.	...	200	33	Completed.
Do. ...	Pálanpur ...	Corrugated iron latrine with 2 seats for women.	...	129	115	Do.
Do. ...	Do. ...	Additions and alterations to the latrine for policemen.	...	69	40	Do.
Poona	Paud ...	Police lines	20	6,533	2,732	Completed at a total cost of Rs. 6,065.
Do.	Awlas ...	Do.	5	1,712	763	Do. do. Rs. 1,730
Do.	Sirur ...	Do.	12	3,585	3,669	Do. do. ,, 3,669
Do.	Ghoda ...	Do.	8	2,423	976	In progress.
Do.	Poona ...	Re-roofing the detached portion of the Police Superintendent's quarters.	...	2,045	2,107	Do.
Do.	Do. ...	Additions and alterations to the quarters for European Constable at the Ghorpuri Bazár in the Cantonment.	...	1,137	1,100	Completed.
Násik	Barhe ...	Police lines	3	1,170	77	Do. Rs. 1,092 spent in 1892-93.
Do.	Nandgaon ...	Record-room for Chief Constable ...	...	699	698	Completed.
Do.	Chándor ...	Wooden shelves in rooms of Police Constables.	...	133	132	Do.
Do.	Násik ...	Galvanized iron wire fencing on three sides of the City Police lines.	...	322	321	Do.
Do.	Igatpuri ...	Concrete floor to rooms, block I, of Police lines.	...	422	417	Do.
Do.	Nampur ...	Police lines	6	1,798	590	In progress.
Do.	Chándor ...	Do.	4	2,302	16	Work suspended pending sanction to revised estimate.
Ahmednagar ...	Ahmednagar	Certain additions to the Táluka Police Chief Constable's office.	...	1,258	1,187	Completed.
Khándesh ...	Shirpur ...	Police lines as an appendage of the new Mámlatdár's Kacheri.	18	4,821	942	In progress.
Do. ...	Wasurdi ...	Constructing three rooms for the Police out-post.	3	1,027	451	Do.
Do. ...	Ghodgaon ...	Lines for the Police out-post	4	1,231	421	Do.
Do. ...	Shelvi ...	Do.	4	1,149	1,096	Do.
Do. ...	Arvi ...	Do.	3	873	689	Completed.
Do. ...	Rodavli ...	Do.	4	1,045	82	In progress.
Do. ...	Rinkhed ...	Do.	4	1,099	132	Do.
Do. ...	Bhatpuri ...	Do.	4	1,337	115	Do.
Do. ...	Pal	Do.	3	943	118	Do.
Do. ...	Boris ...	Police lines	4	1,058	163	Do.
Belgaum ...	Ankalgi ...	Do.	4	1,468	1,006	Do.
Dhárwár ...	Hubli ...	Lines for the Treasury Guard in the Mámlatdár's Kacheri.	10	3,518	1,485	Completed. Rs. 1,686 spent in 1892-93.
Kánara ...	Honávar ...	Police lines	32	10,988	951	Do. Rs. 10,001 spent in previous years.
Bijápur ...	Nidgundi ...	Out-post Police lines	6	2,417	119	Do. Rs. 2,291 do. do.
Do. ...	Bágevádi ...	Police lines	19	7,477	*7	* Land compensation.
Sátára ...	Panchgani ...	Latrines for the Police lines	...	99	90	Completed.
		Carried over ...	279	1,09,939	39,688	

District.	Station.	Nature of Work.	Number of men to be accommodated.	Estimated Cost.	Expended during the year.	Remarks.
				Rs.	Rs.	
		Brought over ...	279	1,09,939	39,688	
Sátára ...	Sátára ...	Converting sheds in the Mámlatdár's Kacheri for the accommodation of the Táluka Police.	10	1,504	1,320	In progress.
Do. ...	Do. ...	Police lines	100	28,965	15,864	Do.
Ratnágiri ...	Vengurla ...	Do.	40	14,384	6,733	Completed. Rs. 5,235 spent in previous years.
Do. ...	Ratnágiri ...	Office for the Head Quarter Chief Constable.	....	2,124	2,045	Completed.
Do. ...	Rajápur ...	Office for the Chief Constable	...	5,911	4,227	In progress.
Hyderabad Canals.	Kandiaro ...	Converting the old Mukhtyárkarate into Police lines.	22	5,353	4,666	Completed.
Do. ...	Naushahro..	Do. do.	21	171	127	Do.
Fuleli Canals...	Talbar ...	Police lines	13	5,681	230	Do.
Eastern Nára..	Umarkot ...	Stables in Police lines (for 6 horses) ...	...	274	274	Do.
Karáchi Canals	Jerruk ...	Constructing sun-shades for the stables.	....	170	160	Do.
Do. ...	Karáchi ...	Providing additional accommodation for the Police.	68	25,718	9,997	In progress.
Do. ...	Do. ...	Making certain additions to the store-room of the District Superintendent of Police.	...	3,212	2,303	Completed at a cost of Rs. 3,210.
Do. ...	Budhápur ...	Constructing Police thána	9	5,942	5,398	Completed.
Shikárpur Canals.	Kandhra ...	Police thána	14	6,833	4,979	Do.
Do. ...	Shikárpur...	Demolishing the two back rows of, and building a compound wall round, the city Police lines.	...	1,576	1,425	Do.
Ghár Canals ...	Lárkhána ...	Constructing new Police buildings in the town.	20	7,533	6,000	In progress.
Western Nára.	Dádu ...	Adding a verandah to the two rooms of mounted Police lines and Sub-registrar's office.	..	500	492	Completed. Rs. 242 debitable to "12—Administration" and Rs. 250 to "17-Police."
Do. ...	Kherpur Nathesha.	Providing screen walls and enlarging windows of armed Police lines.	....	141	141	Completed.
Do. ...	Dokri ...	Constructing verandah to married men's quarters in Police lines.	...	313	269	Do.
		Total ...	596	2,26,244	1,06,338	

APPENDIX C.

STATEMENT SHOWING THE EXPENDITURE INCURRED ON WORKS ESTABLISHMENTS IN THE UNDERMENTIONED DISTRICTS DURING THE YEAR 1893-94, AND THE PERCENTAGE IT BEARS TO THE OUTLAY ON WORKS AND REPAIRS PROPER.

No.	Divisions and Districts.	Outlay on: By contract. Original Works including additions and alterations and improvements and extensions.	By contract. Repairs.	By contract. Total.	By Departmental Agency. Original Works including additions and alterations and improvements and extensions.	By Departmental Agency. Repairs.	By Departmental Agency. Total.	Total Contract and Departmental, columns 5 and 8.	Cost of Work Establishment sanctioned by: Chief or Superintending Engineer.	Executive Engineer.	Total.	Percentage (column 12 bears to column 9).
1	2	3	4	5	6	7	8	9	10	11	12	13
	Northern Division.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1	Presidency	1,58,142	81,605	2,39,747	5,148*	48,816*	53,964	2,93,711	7,064	7,759	14,823	5·32
		Deduct charges		for work	establishment included.			—14,823				
								2,78,888				
2	Thána	1,994	...	1,994	43,235	1,13,662	1,56,897	1,58,891	2,312	6,147	8,459	5·32
3	Surat and Broach ...	27,626	8,215	35,841	1,25,996	89,749	2,15,745	2,51,586	3,006	10,600	13,606	5·41
4	Kaira and Panch Mahás	...	...	...	85,698	80,608	1,66,306	1,66,306	2,674	9,701	12,375	7·44
5	Ahmedabad	...	...	...	1,46,147	1,39,912	2,86,059	2,86,059	2,962	15,718	18,680	6·53
	Total, N. D. ...	1,87,762	89,820	2,77,582	4,06,224	4,72,747	8,78,971	11,56,553	18,018	49,925	67,943	5·95
		Deduct charges		for work	establishment included.			—14,823				
								11,41,730				
	Central Division.											
6	Násik...	16,149	7,075	23,224	13,983	81,165	95,148	1,18,372	...	8,533	8,533	7·21
7	Ahmednagar ...	19,303	4,499	23,802	46,626	1,08,311	1,54,937	1,78,739	3,592	10,413	14,005	7·83
8	Sholápur	...	...	...	32,571	57,229	89,800	89,800	1,936	5,026	6,962	7·75
9	Poona District ...	1,26,412	1,367	1,27,779	28,452	1,77,825	2,06,277	3,34,056	4,954	12,785	17,739	5·31
10	Khándesh	8,057	...	8,057	1,52,982	1,38,445	2,91,427	2,99,484	6,453	21,467	27,920	9·32
	Total, C. D. ...	1,69,921	12,941	1,82,862	2,74,614	5,62,975	8,37,589	10,20,451	16,935	58,224	75,159	7·36
	Southern Division.											
11	Belgaum	1,195	7,812	9,007	2,33,698	1,11,550	3,45,248	3,54,255	2,844	11,796	14,640	4·13
12	Dhárwár	91,054	13,762	1,04,816	42,644	1,15,047	1,57,691	2,62,507	3,597	11,790	15,387	5·86
13	Bijápur	2,365	...	2,365	51,864	48,645	1,00,509	1,02,874	2,191	6,866	9,057	8·81
14	Ratnágiri and Kolába	7,208	...	7,208	74,598	1,25,122	1,99,720	2,06,928	2,893	11,065	13,958	6·74
15	Kánara	16,600	...	16,600	17,293	1,12,102	1,29,395	1,45,995	3,521	6,433	9,954	6·82
16	Sátára	62,030	15,560	77,590	19,018	1,58,468	1,77,486	2,55,076	3,102	12,490	15,592	6·11
	Total, S. D. ...	1,80,452	37,134	2,17,586	4,39,115	6,70,934	11,10,049	13,27,635	18,148	60,440	78,588	5·92
	Indus Left Bank Division.											
17	Hyderabad Buildings	67,961	...	67,961	1,71,177	8,135	1,79,312	2,47,273	520	5,208	5,728	2·37
		Deduct cost		of work	establishment.			—5,728				
								2,41,545				
18	Fuleli Canals ...	859	2,710	3,569	...	...	...	3,569	...	18	18	0·50
		Deduct cost		of work	establishment.			—18				
								3,551				
19	Eastern Nára ...	25,726	4,899	30,625	...	...	...	30,625	49	...	49	0·16
		Deduct cost		of work	establishment.			—49				
								30,576				
20	Hyderabad Canals ...	27,983	4,364	32,347	...	...	...	32,347	...	...	...	...
	Total, Indus Left Bank Division ...	1,22,529	11,973	1,34,502	1,71,177	8,135	1,79,312	†3,13,814	569	5,226	5,795	1·88
		Deduct cost		of work	establishment.			—5,795				
								3,08,019				
	Indus Right Bank Division.											
21	Begári Canals ...	1,641	...	1,641	...	793	793	2,434	...	109	109	4·47
22	Shikárpur Canals ...	39,616	9,227	48,843	...	...	...	48,843	...	175	175	0·36
23	Ghár Canals... ...	6,416	2,162	8,578	8,568	...	8,568	17,146	...	68	68	0·40
24	Karáchi Canals ...	37,478	21,900	59,378	...	949	949	60,327	...	1,930	1,930	3·20
	Total, Indus Right Bank Division ...	85,151	33,289	1,18,440	8,568	1,742	10,310	1,28,750	...	2,282	2,282	1·78
	Grand Total ...	7,45,815	1,85,157	9,30,972	12,99,698	17,16,533	30,16,231	39,47,203	53,670	1,76,097	2,29,767	5·85
		Deduct charges		for work	establishment included.			—20,618				
								39,26,585				

* These are approximate figures.

† Exclusive of expenditure on land at Jámráo.

REPORTS ON WORK ESTABLISHMENT FOR 1893-94.

Explanatory Remarks submitted by the Superintending Engineer, Northern Division, with his No. 2238, dated 17th May 1894, regarding Work Establishment.

The foregoing statement shows the expenditure on work establishment, as compared with the total expenditure on works and repairs in different districts in the Northern Division.

In the Presidency District, the percentage of work establishment to works during the year was 5·32, against 2·79 in the previous year. The increase is explained by the fact that, during 1893-94, the expenditure was Rs. 2,78,888 only, against Rs. 5,27,952 in 1892-93. For the present no reduction under this head can be effected without affecting the efficiency of the works in hand. The maximum and minimum salaries of maistries and clerks, respectively, were Rs. 75 to 40, and 35 to 15 per mensem.

In the Thána District during the year 1893-94, the total expenditure on Provincial, Local and Imperial works and repairs taken together, but exclusive of work establishment, was Rs. 1,58,891, and the cost of the works establishment employed was Rs. 8,459, of which one-third was sanctioned by the Superintending Engineer, and two-thirds employed by the Executive Engineer on his own authority. The establishment thus amounted to a charge of 5·32 per cent. on the total sum expended. Now last year, when the expenditure was Rs. 1,96,568, and the establishment charged to works Rs. 9,851, the percentage was 5·01. This year the amount of work to be done was less, and the percentage has very slightly increased, and this is unavoidable. The salaries of maistries varied from Rs. 20 to Rs. 35 per month, but there is only one man on Rs. 35, and he is of long service and an experienced man; the usual pay is Rs. 20 to 25. The pay of the clerks varied from Rs. 10 to Rs. 23, but there is only one man on Rs. 23, a special case similar to the above maistry. The usual pay is Rs. 12 to Rs. 18, ordinary mustering kárkúns being paid Rs. 12, or, until they have shown that they can do their work satisfactorily, Rs. 10 only.

In the Surat and Broach District, the percentage of work establishment in 1893-94 was Rs. 5·41, as compared with 6·73 in the previous year. This favourable result is mainly due to the total outlay on works in 1893-94, being nearly 50 per cent. in excess of that in 1892-93. The minimum and maximum salaries of maistries and clerks, respectively, were Rs. 20 to Rs. 45, and Rs. 14 to Rs. 30.

In the Kaira District, the total expenditure on work establishment has been about the same as in the previous year, and the total expenditure on works and repairs being greater, the percentage this year (7·44) compares favourably with that of the previous year (8·13). The minimum and maximum salaries of maistries, clerks and kárkúns, were, respectively, Rs. 20, 15 and 10, to Rs. 35, 25 and 18 per mensem.

In the Ahmedabad District, the charges of work establishment during 1893-94 were 6·53 per cent., against 5·35 per cent. during 1892-93. The extra charges are partly due to a number of works, formerly given in contract, being carried out departmentally during the year under report, and partly to some of the large works, *viz.*, Sábarmati bridge, Ahmedabad water and drainage works, and Central Jail, Ahmedabad, which were in full progress in 1892-93, having been either completed, or nearly so, in 1893-94. Though there is an increase in the percentage rate of establishment, it is believed that certain rates for work done (digging kunker for instance) have fallen considerably, owing to the non-employment of contractors. Maistries' pay varies from Rs. 15 to 50, and clerks' from Rs. 17 to 30.

Kaira and Ahmedabad show a worse percentage than the other districts, and this is due probably to there being a large number of small works scattered about over a large extent of country. Works in the Mahi Kántha and Rewa Kántha States are troublesome and expensive. Kaira, moreover, has been very unfortunate in its permanent establishment, and credit is due to the Executive Engineer that the percentage rate has been reduced.

Extract of paragraph 6 of a letter from the Chief Engineer, Central Division, No. 2805, dated 8th June 1894.

In reply to a reference, the Executive Engineer, Poona District, explains that the high percentages in sub-divisions 1, 3 and 4 are due to the scattered nature of the works, and comparatively small amount of expenditure in those sub-divisions, as compared with works and expenditure in the remaining sub-divisions.

The Executive Engineers, Ahmednagar, and Násik, have explained the high percentages of works establishment in the statements for their districts, as under—

	Ahmednagar.	*General Remark.*
Sub-divisions 2 and 4 ...	... High percentage due to scattered works extending through five tálukas, and also to proportionately less amount of outlay incurred. After great economy observed in keeping the strength of establishment as low as possible, the result has thus been arrived at. Any further reduction cannot be attempted without detriment to proper supervision of works. Work has to be carried out departmentally because the sums sanctioned for repairs are so small, amounting for repairs to building, in sub-division 4 to 0·90 per cent. of their cost.	The average for the whole district is, it is thought, satisfactorily low, especially if the Irrigation Sub-division be excluded. The nature of work in a district must naturally make a material difference in the percentage.
Sub-division 7	... Owing to the revenue management on irrigation works, the establishment charge is naturally greater than in the course of ordinary works, as there is comparatively very little expenditure.	

Násik.

The percentage charges are nearly two per cent. less this year than the previous year.

Extract paragraph 2 of a letter from the Chief Engineer, C. D., No. 3088, dated 20th June 1894.

The rather high percentage in the Pandharpur and Bársi Sub-divisions was due to works being scattered and the expenditure on them being very small.

Extract of a letter from the Executive Engineer, Khándesh District, No. 2882, dated 19th June 1894, submitted under the Chief Engineer, C. D.'s No. 3203, dated 25th June 1894.

In reply to your No. 2797 of 8th June 1894, I have the honour to request reference to this office No. 3271 of 27th July 1893, printed in the Administration Report for the last year, which gives the reasons for excess in percentage of work establishment in sub-divisions 6, 7 and 8. From the comparative statement submitted, it may be seen that in these sub-divisions the percentages are almost the same as those for the last year, remembering that the Dondaicha and Shaháda sub-divisions have been amalgamated since February last.

2. Similarly, the Amalner sub-division has been amalgamated with the Dhulia sub-division, and the original work on Dhulia-Amalner road being completed, there was no considerable expenditure on the road, though for current repairs two kárkúns and a maistry had to be maintained. The Ráo Bahádur Garod High School is in progress for the last three months of the past year, and a Sub-overseer charged to works has been employed in sub-ordinate supervision on it; as, however, no payment was made to the contractor until the end of the year, the percentage has slightly increased, though it is below the average.

3. The increase in the percentage of sub-division 2 is due to less expenditure on original works. The establishment had still to be maintained, and could not be reduced.

4. The percentages in sub-divisions 3 and 5 show no increase.

5. As regards the high percentage of work establishment in sub-division 4, I request you to refer to paragraph 6 of the letter quoted above, and have the honor to add that the further increase was due to small work done by the contractor and to the stoppage of the original road work on Nimbgawan-Chopda road for some time, and also to the scattered works of Police outposts.

6. The excess in Shirpur Sub-division is mainly due to very slow progress on stone quarries for the Mámlatdár's Kacheri, though a maistry and a kárkún had to be maintained for the collection of materials, &c., all the same.

Extract paragraph 8 of the General Remarks submitted with the Superintending Engineer, Southern Division's No. 1856, dated 29th May 1894.

It will be noticed that the average percentage for the Division for the year compares favourably with that for last year, being 5·92 against 7·60. The percentage for the Executive Districts individually, with the exception of Bijápur, shows also a decrease as compared with last year's figures.

Extract paragraph 15 of the General Remarks submitted by the Superintending Engineer, Indus Left Bank Division, with his No. 1650, dated 29th May 1894.

A statement in the prescribed form, showing expenditure incurred on work establishment employed on Civil works during the year under report, will be found in the appendix. The total charge was Rs. 5,795, of which Rs. 5,728 were spent in the Hyderabad buildings district alone; the reason for which was that the new Central Jail is being constructed almost entirely with unskilled convict labour, and additional establishment is, therefore, required. The balance Rs. 67 was expended in the Fuleli and Eastern Nára Districts, Rs. 18 and 49 respectively, and needs no remarks. Of the total charge of Rs. 5,795 referred to above, Rs. 569 were sanctioned by the Superintending Engineer, and the remainder, Rs. 5,226, by Executive Engineers. No work establishment for new works was entertained in the Hyderabad Canals District.

APPENDIX D.

STATEMENT SHOWING THE EXTENSIONS OF IMPERIAL, PROVINCIAL AND LOCAL FUND ROADS UNDER PUBLIC WORKS AGENCY DURING THE YEAR 1893-94.

NOTE.—The last complete statement was issued as an Appendix to the Administration Report for 1891-92.

Statement showing the extensions of Roads constructed and in progress maintained from IMPERIAL AND PROVINCIAL FUNDS in the Bombay Presidency for the year 1893-94.

Executive Districts.	Classification and names of roads.	Length in miles. Completed.		In progress.		Total.		Average total cost of construction per mile.	Average annual cost of maintenance and repairs in the last five years.	Remarks.
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Rs.	Rs.	
	IMPERIAL.									
	Nil.									
	PROVINCIAL.									
	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.									
	SOUTHERN DIVISION.									
Belgaum ...	Road from Nipáni to Mahálingpur... ...	1	1,320	.....		1	1,320	8,816	5,672	
	Do. Gokák to Navalgund	1	0	.....		1	0	8,742	4,215	
	Total, Belgaum District ...	2	1,320	.....		2	1,320	.....	...	
	TOTAL, SOUTHERN DIVISION ...	2	1,320	.....		2	1,320	.....	...	
	TOTAL, III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT	2	1,320	.....		2	1,320	.....	...	
	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.									
	CENTRAL DIVISION.									
Ahmednagar ...	Road from Nandur Singota to Ambeghargaon (Násik-Poona Road) ...	8	0	.....		8	0	1,810	5,877	Partly metalled.
	Do. Jámgaon to Kotul	10	0	.....		10	0	2,859	...	Nearly completed.
	Do. Randha to Samrad	9	0	.....		9	0	3,325	...	Nearly completed.
	Total, Ahmednagar District ...	27	0	.....		27	0	.....	...	
	TOTAL, CENTRAL DIVISION ...	27	0	.....		27	0	.....	...	
	TOTAL, IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED	27	0	.....		27	0	.....	...	
	GRAND TOTAL, PROVINCIAL ROADS	29	1,320	.....		29	1,320	.....	...	
	TOTAL OF III AND IV ...	29	1,320	.....		29	1,320	.....	...	

ABSTRACT OF PROVINCIAL ROADS.

	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT.		II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.		III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.		IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.		V.—VILLAGE OR CLEARED ROADS.	
	PROVINCIAL.		PROVINCIAL.		PROVINCIAL.		PROVINCIAL.		PROVINCIAL.	
	Length in miles.		Length in miles.		Length in miles.		Length in miles.		Length in miles.	
	Completed.	In progress.	Completed.	In progress.	Completed.	In progress.	Completed.	In progress.	Completed.	In progress.
	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.
Northern Division ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Southern Division ...	.....	.....	.....	.....	2 1,320	.....	.....	.....	.....	.....
Central Divison	.....	.....	.....	.....	.....	.....	27 0	.....	.....	.....
Sind Division	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total ...	.....	.....	.....	.....	2 1,320	.....	27 0	.....	.....	.....

	LENGTH IN MILES.			
	Completed.	In progress.	Total.	Grand Total.
	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.
Imperial Roads	.....	.....	.....	.....
Provincial Roads III and IV ...	29 1,320	.....	29 1,320	29 1,320

Statement showing the extensions of LOCAL FUND ROADS constructed and in progress maintained by the Public Works Department in the Bombay Presidency for the year 1893-94.

Executive Districts.	Classification and names of roads.	Length in miles. Completed.	In progress.	Total.	Average total cost of construction per mile.	Average annual cost of maintenance and repairs in the last five years.	Remarks.
		Ms. ft.	Ms. ft.	Ms. ft.	Rs.	Rs.	
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT.						
	Northern Division.						
Ahmedabad ...	Road from Ahmedabad to Bareja	.....	11 0	11 0	10,511	(a) 561	(a) In progress. Average of 4 years.
	Total, Ahmedabad District ...	.....	11 0	11 0	.....	...	
Kaira and Panch Mahals.	Road from Nadiád to Kapadvanj	27 0	.....	27 0	14,119	...	Out of this 18 miles are metalled and the remaining 9 miles, a portion of it is being metalled.
	Road from Petlád to Cambay, British Portion ...	5 4,875	.....	5 4,875	8,975	...	Completed.
	Do. do. Cambay Portion...	.....	5 972	5 972	9,143	...	Earth-work completed.
	Total, Kaira and Panch Mahals Districts ...	32 4,875	5 972	38 567	.....	...	
Surat and Broach.	Road from Surat to Bárdoli (British limits) ...	.....	5 1,320	5 1,320	19,669	1,500	Constructed and maintained by Sachin State.
	Do. do. in Sachin State ...	4 0	.....	4 0	6,253	...	
	Do. Sachin to Lajpor	3 0	.....	3 0	4,218	900	
	Total, Surat and Broach Districts ...	7 0	5 1,320	12 1,320	.....	...	
	Total, Northern Division ...	39 4,875	21 2,292	61 1,887	.....	...	

		SOUTHERN DIVISION.							
Belgaum ...	Road from Dhupdal Railway Station to Gokák Falls Mills	2	2,640	0	3,960	3	1,320	....	In progress.
	Total, Belgaum District ...	2	2,640	0	3,960	3	1,320	....	
	TOTAL, SOUTHERN DIVISION ...	2	2,640	0	3,960	3	1,320	....	
	TOTAL, I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT	42	2,235	22	972	64	3,207	....	
	II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.								
	NORTHERN DIVISION.								
Surat and Broach..	Road from Bárdoli to Sarbhon	.....		5	660	5	660	Unknown ... 300	
	Total, Surat and Broach Districts ...	.....		5	660	5	660	....	
Thána	Road from Bháyndar to Utan	.....		.....		.....		....	Transferred to Class IV.
	Road from Máhim to Váda	.....		.....		.....		....	Do. do.
	Road from Kalyán to Dhysur	.....		.....		.....		....	Do. do.
	Total, Thána District ...	.....		.....		.....		....	
	TOTAL, NORTHERN DIVISION ...	.....		5	660	5	660	....	
	SOUTHERN DIVISION.								
Bijápur ...	Road from Hundgund to Ilkal	6	3,960	1	1,320	8	0	3,322 ...	
	Total, Bijápur District ...	6	3,960	1	1,320	8	0	....	
	TOTAL, SOUTHERN DIVISION ...	6	3,960	1	1,320	8	0	....	
	TOTAL, II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED	6	3,960	6	1,980	13	660	....	
	Carried over ...	49	915	28	2,952	77	3,867	....	
	Carried over Totals of I and II ...	49	915	28	2,952	77	3,867	....	

LOCAL FUND ROADS—*continued.*

Executive Districts.	Classification and names of roads.	Length in miles. Completed.	In progress.	Total.	Average total cost of construction per mile.	Average annual cost of maintenance and repairs in the last five years.	Remarks.
		Ms. ft.	Ms. ft.	Ms. ft.	Rs.	Rs.	
	Brought forward ...	49 915	28 2,952	77 3,867	.....	...	
		49 915	28 2,952	77 3,867	.....	...	
	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.						
	Northern Division						
Surat and Broach.	Road from Surat Railway Station to Varacha ...	.....	3 2,640	3 2,640	1,400	980	
	Total, Surat and Broach Districts ...	.....	3 2,640	3 2,640	.....	...	
	Total, Northern Division ...	.....	3 2,640	3 2,640	.....	...	
	Central Division.						
Násik	Ghoti-Barighat Road	.....	.....	.....	.....	...	Transferred from Class IV.
	Total, Násik District ...	.....	.....	.....	.....	...	
	Total, Central Division ...	.....	.....	.....	.....	...	
	TOTAL, III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT	.....	3 2,640	3 2,640	.....	...	

	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.							
	NORTHERN DIVISION.							
Thána ...	Road from Máhim to Váda	.....	.....	.....	.....	...	Transferred from Class I.
	Road from Kalyán to Dhysur	.....	.....	.....	.....	...	Do. do.
	Road from Bháyndar to Utan	1 2,640	.....	1 2,640	5,646	671	Do. do.
	Total, Thána District ...	1 2,640	.....	1 2,640	.....	...	
	TOTAL, NORTHERN DIVISION ...	1 2,640	.....	1 2,640	.....	...	
	SOUTHERN DIVISION.						
Bijápur ...	Bijápur-Indi road	8 0	2 0	10 0	314	1,561	Average of 3 years.
	Almel-Pandharpur road, portion from Almel to Shirdhon...	1 2,640	2 2,640	4 0	876	1,815	
	Road from Kerur to Katgeri	8 0	1 0	9 0	3,080	...	
	Total, Bijápur District ...	17 2,640	5 2,640	23 0	.....	...	
	TOTAL, SOUTHERN DIVISION ...	17 2,640	5 2,640	23 0	.....	...	
	CENTRAL DIVISION.						
Sholápur ...	Road from Sholápur to Bársi	42 0	.....	42 0	1,329	905	These roads have been transferred from the Civil to Public Works Agency.
	Do. Mohol Station to Pandharpur ...	24 0	.....	24 0	Not known ..	536	
	Portion of Temburni-Málsiras Road ...	10 0	.....	10 0	209	484	
	Do. Pandharpur-Phaltan Road ...	3 0	.....	3 0	.....	...	
	Total, Sholápur District ...	79 0	.....	79 0	.....	...	
Násik	Road from foot of Nánáshighat to Haste and Bareh	3 0	.....	3 0	2,264	977	Transferred from Class V.
	Ghoti-Barighat Road	.....	.....	.....	.....	...	Transferred to Class I.
	Dubera-Thangaon Road	.....	0 3,960	0 3,960	6,040	...	Transferred to Class III.
	Total, Násik District ...	3 0	0 3,960	3 3,960	.....	...	
	Carried over ...	150 915	38 1,632	188 2,547	.....	...	
	Carried over Totals of I, II and III ...	49 915	32 312	81 1,227	.....	...	

LOCAL FUND ROADS—*concluded.*

Executive Districts.	Classification and names of roads.	Length in miles. Completed. Ms.	ft.	In progress. Ms.	ft.	Total. Ms.	ft.	Average total cost of construction per mile.	Average annual cost of maintenance and repairs in the last five years.	Remarks.
	Brought forward ...	49	915	32	312	81	1,227	.....	...	
		150	915	38	1,632	188	2,547	.....	...	
	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED—*concluded.*									
	CENTRAL DIVISION—*concluded.*									
Khándesh ...	Dhulia-Amalner road	8	0	.....		8	0	47,770	1,597	
	Junction road at Bhadgaon	1	783	.....		1	783	5,620	...	
	Total, Khándesh District ...	9	783	.....		9	783	.....	...	
Ahmednagar ...	Road from Supa to Pimpalgaon-Deepa ...	5	0	.....		5	0	.....	1,044	Village road improved.
	Road from Kharda to Shrigonda	2	0	.....		2	0	Unknown ...	5,676	
	Road from Nevása to Sheogaon	0	2,640	.....		0	2,640	1,734	1,056	Average of three years.
	Total, Ahmednagar District ...	7	2,640	.....		7	2,640	.....	...	
	TOTAL, CENTRAL DIVISION ...	98	3,423	0	3,960	99	2,103	.....	...	
	TOTAL, IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.	117	3,423	6	1,320	123	4,743	.....	...	

	V.—VILLAGE OR CLEARED ROADS.							
	CENTRAL DIVISION.							
Násik	Road from foot of Nánáshighát to Haste and Bareh	.....		.....		.....	.....	... Transferred to Class IV.
	Total, Násik District ...	.....		.....		.....	.....	...
	TOTAL, CENTRAL DIVISION ...	.....		.....		.....	.....	...
	TOTAL V.—VILLAGE OR CLEARED ROADS ...	.....		.....		.....	.....	...
	GRAND TOTAL FOR LOCAL ROADS ...	166	4,338	38	1,632	205 690	.....	...
	Totals of I, II, III, IV and V.—Roads ...	166	4,338	38	1,632	205 690	.....	...

ABSTRACT OF LOCAL FUND ROADS IN CHARGE OF THE PUBLIC WORKS DEPARTMENT.

Classification and names of roads.	Length in Miles.			Remarks.
	Completd.	In progress.	Total.	
	Ms. ft.	Ms. ft.	Ms. ft.	
I.—*Roads metalled, bridged and drained throughout.*				
Northern Division	39 4,875	21 2,292	61 1,887	
Southern do.	2 2,640	0 3,960	3 1,320	
Central do.	.....	.....	.....	
Total ...	42 2,235	22 972	64 3,207	
II.—*Roads metalled and drained throughout, but the large rivers not bridged.*				
Northorn Division	.....	5 660	5 660	
Southern do.	6 3,960	1 1,320	8 0	
Central do.	.....	.....	.....	
Total ...	6 3,960	6 1,980	13 660	
III.—*Muram roads bridged and drained throughout.*				
Northern Division	.....	3 2,640	3 2,640	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Total ...	.....	3 2,640	3 2,640	
IV.—*Muram roads drained throughout, but the large rivers not bridged.*				
Northern Division	1 2,640	.....	1 2,640	
Southern do.	17 2,640	5 2,640	23 0	
Central do.	98 3,423	0 3,960	99 2,103	
Total ...	117 3,423	6 1,320	123 4,743	
V.—*Village or cleared roads.*				
Northern Division	.....	.....	.....	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Total ...	.....	.....	.....	
Grand Totals of I, II, III, IV and V.	166 4,338	38 1,632	205 690	

Note.—The Local Fund Roads in Sind are all in the charge of Civil Officers, not the Public Works Department.

APPENDIX E.

STATEMENT SHOWING THE PROGRESS MADE IN THE DEMARCATION OF ROADS UNDER PUBLIC WORKS AGENCY DURING THE YEAR 1893-94.

APPENDIX E.

Statement showing the Progress made in the Demarcation of roads under Public Works Agency during the year 1893-94.

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated.			Number of miles of roads to be demarcated.	Remarks.
			Up to 31st March 1893.	In 1893-94.	Total.		
	IMPERIAL MILITARY.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	
	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.						
	CENTRAL DIVISION.						
Poona District	Road leading from Sásvad to foot of the Purandhar Hill	5 4,435	0 3,960	1 0	1 3,960	4 475	By aloe hedge.
	Total, Imperial Military roads ...	5 4,435	0 3,960	1 0	1 3,960	4 475	
	IMPERIAL CIVIL.						
	II.—ROADS BRIDGED AND DRAINED THROUGHOUT BUT NOT METALLED.						
	NORTHERN DIVISION.						
Thána ...	Road from Umele to Pápdi ...	1 2,640	0 2,800	0 2,480	1 0	0 2,640	
	Total, Imperial Civil roads ...	1 2,640	0 2,800	0 2,480	1 0	0 2,640	

PROVINCIAL.

I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT.

NORTHERN DIVISION.

Ahmedabad	Extra Municipal roads, Ahmedabad..	4	2,090	4	1,380	0	710	4	2,090	.....	
	Road from foot of overbridge approaches near the Kálupur Gate to junction with road to Camp Ahmedabad	1	3,000	1	2,220	0	780	1	3,000	.....	
	Road from Modása to Bibipura ...	18	0	9	0	9	0	18	0	.....	
	Road from Dhunsura to Harsol ...	13	0	.....		13	0	13	0	.....	
	Total, Ahmedabad District ...	36	5,090	14	3,600	22	1,490	36	5,090	.....	
Kaira and Panch Maháls.	Road from Kapadvanj to Bibipura, including a branch to Ladwel ...	33	0	33	0	.....		33	0	.....	
	Limkheda and Jhálod road (Provincial portion)	10	2,640	.....		7	0	7	0	3	2,640
	Total, Kaira and Panch Maháls ...	43	2,640	33	0	7	0	40	0	3	2,640
Thána	Road from Neral to Mátherán ...	7	2,640	.....		.....		.....		7	2,640
	Do. Dáhánu to Jawhár ...	27	0	27	0	.....		27	0	.....	
	Do. Ulwa to Cámpuli ...	13	2,640	11	1,320	.....		11	1,320	2	1,320
	Do. Dharamtar to Cámpuli...	3	2,640	3	2,640	.....		3	2,640	.....	
	Do. Váda to Shirghát ...	30	0	30	0	.....		30	0	.....	
	Do. Thána to Panvel ...	10	2,640	.....		.....		.....		10	2,640
	Esplanade roads, Thána ...	1	3,780	.....		.....		.....		1	3,780
	Total, Thána District ...	93	3,780	71	3,960	.....		71	3,960	21	5,100
	TOTAL, NORTHERN DIVISION ...	174	950	119	2,280	29	1,490	148	3,770	25	2,460
	Carried over ...	174	950	119	2,280	29	1,490	148	3,770	25	2,460

PROVINCIAL ROADS—*continued.*

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated.				Number of miles of roads to be demarcated.		Remarks.
			Up to 31st March 1893.		In 1893-94.		Total.				
		Ms. ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward ...	174 950	119	2,280	29	1,490	148	3,770	25	2,460	
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT—*continued.*										
	CENTRAL DIVISION.										
Poona District	Road from Poona to the foot of the Bhor Ghát (Poona-Bombay road)...	47 622	20	0	4	0	24	0	23	622	By trench and hedge.
	Approach road to Deccan Central Jail, Yerrowda	1 1,320	.....		.....		.....		1	1,320	
	Road from Poona to Shirval (new Sátára road)	27 3,192	23	1,320	2	0	25	1,320	2	1,872	By aloe hedge.
	Road from G. I. P. Railway Level Crossing near Ghorpadi Station to Sirúr (Poona-Ahmednagar road) ...	41 4,850	14	3,960	1	0	15	3,960	26	890	Five miles marked by stone and cutting a trench between the stones and in 10¾ miles by trench and aloe hedge.
	Road joining Fitzgerald and Holker's Bridge	1 3,420	.....		.....		.....		1	3,420	
	Singhar road from Bombay road to join Kharakwasla road ...	3 1,230	.....		.....		.....		3	1,230	
	Road from Bhamburda level crossing to Oundh	3 4,720	.....		.....		.....		3	4,720	
	Road joining Bombay road with Oundh road	1 4,563	.....		.....		.....		1	4,563	
	Total, Poona District ...	128 2,797	58	0	7	0	65	0	63	2,797	
Sholápur ...	Bársi Station-Bársi Town road ...	21 0	20	2,640	.....		20	2,640	0	2,640	Portions lying in the Bársi Municipal limit are not demarcated.
	Total, Sholápur District ...	21 0	20	2,640	.....		20	2,640	0	2,640	
Násik ...	Manmád and Kopargaon road ...	20 3,300	.....		3	3,960	3	3,960	16	4,620	New demarcation with flat stones with semicircular heads having the letter B cut on one side and fixed at every half furlong on either side of road.
	Total, Násik District ...	20 3,300	.....		3	3,960	3	3,960	16	4,620	

Ahmednagar ...	Road from Ahmednagar to Sirúr ...	31	0	1	0	2	0	3	0	28	0	Partly stone and partly trench.
	Total, Ahmednagar District ...	31	0	1	0	2	0	3	0	28	0	
Khándesh ...	Málegaon-Manmád road ...	21	0	21	0	.....		21	0	.....		
	Cross roads between Cantonment and Málegaon	3	0	3	0	.....		3	0	.....		
	Roads connecting Government buildings at Bhusával ...	1	0	1	0	.....		1	0	.....		
	Total, Khándesh District ...	25	0	25	0	.....		25	0	.....		
	Total, Central Division ...	226	817	104	2,640	12	3,960	117	1,320	108	4,777	
	Southern Division.											
Belgaum ...	Road from Poona to Bangalore— Section from Dudhganga to Malaprabha river	75	3,960	3	3,960	67	0	70	3,960	5	0	5 miles are not required to be demarcated as they pass through Government Forest land, villages, towns, &c.
	Road from Várna to Dudhganga ...	28	0	11	2,640	16	2,640	28	0	.....		
	Krishna Bridge road	3	1,980	3	1,980	.....		3	1,980	.....		
	Road from Khánápur to Yellápur— Section from Khánápur to Linganmath	22	0	.....		22	0	22	0	.....		
	Road from Belgaum to Bágalkot— Section from Belgaum to Korkup	43	0	17	0	17	1,320	34	1,320	8	3,960	8 miles 3,960 feet of road to be demarcated are in Sángli State.
	Road from Belgaum to Vingurla— Section from Belgaum to Amboli.	43	0	4	3,960	25	1,320	30	0	13	0	13 miles are not required to be demarcated as they pass through Government Forest land, villages, towns, &c.
	Total, Belgaum District ...	215	660	40	1,980	148	0	188	1,980	26	3,960	
Dhárwár ...	Road from Poona to Bangalore— Section from Malaprabha river at Mugutkhán Hubli to Harihar	120	2,640	52	3,120	60	1,641	112	4,761	7	3,159	
	Dhárwár Railway feeder road ...	0	4,900	0	3,400	0	1,500	0	4,900	.....		
	Road from Kárwár to Bellary— Section from Santikop to Hubli.	27	2,640	16	4,620	4	1,980	21	1,320	6	1,320	
	Road to connect the Dundur Railway station with the Hubli-Sholápur road	1	660	1	660	.....		1	660	.....		
	Total, Dhárwár District ...	150	280	71	1,240	64	5,121	136	1,081	13	4,479	
	Carried over ...	765	2,707	335	2,860	255	11	590	2,871	174	5,116	

PROVINCIAL ROADS—*continued.*

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated: Up to 31st March 1893.		In 1893-94.		Total.		Number of miles of roads to be demarcated.		Remarks.
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward ...	765	2,707	335	2,860	255	11	590	2,871	174	5,116	
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT—*concluded.*											
	SOUTHERN DIVISION—*concluded.*											
Bijápur ...	Road from Belgaum to Bágalkot—Section from Kajidoni to Bágalkot	18	1,980	18	1,980	.....		18	1,980	.....		
	Total, Bijápur District ...	18	1,980	18	1,980	.....		18	1,980	.....		
Sátára ...	Road from Mahábaleshvar to Sátára.	33	0	17	0	8	0	25	0	8	0	
	Surul-Mahábaleshvar road ...	26	2,640	21	0	3	0	24	0	2	2,640	
	Road from Karád to Chiplun—Section from Karád to the foot of the Kumbhárli Ghát ...	46	0	36	0	.....		36	0	10	0	
	Road from Sátára to Shendra ...	4	0	3	0	.....		3	0	1	0	
	Total, Sátára District ...	109	2,640	77	0	11	0	88	0	21	2,640	
Ratnágiri and Kolába.	Road from Bombay to Poona—Section from Ulwa to Chowk ...	16	0	4	0	12	0	16	0	.....		
	Road from Ratnágiri to Amba Ghát.	42	1,760	18	1,760	*		18	1,760	24	0	* Rs. 43-5 have been spent in collecting stones.
	Total, Ratnágiri and Kolába Districts	58	1,760	22	1,760	12	0	34	1,760	24	0	
	Road from Sangtikop to Kárwár *viâ* Arbail Ghát	74	3,960	.....		18	5,252	18	5,252	55	3,988	55 miles 3,988 feet are not required to be demarcated as they run through Government Forests.

	Road from Yekumbi to Samasgi ...	6	2,640	.....		.....		.....		6	2,640	Out of this 5 miles 3,220 feet	do.	do.
	Road from Palla to Bankápur ...	2	2,640	.....		.....		.....		2	2,640	2 miles 2,640 feet	do.	do.
Kánara ...	Road from Kárwár to Kodibág ...	2	2,640	.....		1	4,839	1	4,839	0	3,081	3,081 feet	do.	do.
	Road from Koney Bridge to Shezwad	2	3,780	.....		2	3,008	2	3,008	0	772	772 feet	do.	do.
	Road from Katgal to the bank of Tadri river	1	0	.....		0	2,105	0	2,105	0	3,175	3,175 feet	do.	do.
	Road from Haliyál to Belgaum Frontier up to Linganmath ...	9	0	.....		8	970	8	970	0	4,310	4,310 feet	do.	do.
	Road from Koney to the Kodibág road *viâ* Jail at Kárwár	1	2,490	.....		0	2,640	0	2,640	0	5,130	5,130 feet	do.	do.
	Total, Kánara District ...	100	2,310	.....		32	2,974	32	2,974	67	4,616			
	TOTAL, SOUTHERN DIVISION ...	651	4,350	229	1,680	268	2,815	497	4,495	153	5,135			
	SIND DIVISION.													
Western Canals. Nára	Bágho-toro road	5	0	5	0	.....		5	0	.....				
	TOTAL, SIND DIVISION ...	5	0	5	0	.....		5	0	.....				
	TOTAL (I) ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT	1,057	837	458	1,320	310	2,985	768	4,305	288	1,812			
	II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.													
	NORTHERN DIVISION.													
Thána ...	Bombay-Agra road portion from Kurla to Kássára	65	0	30	0	.....		30	0	35	0			
	Total, Thána District ...	65	0	30	0	.....		30	0	35	0			
	TOTAL, NORTHERN DIVISION ...	65	0	30	0	.....		30	0	35	0			
	Carried over ...	1,122	837	488	1,320	310	2,985	798	4,305	323	1,812			
	Carried over total of I ...	1,057	837	458	1,320	310	2,985	768	4,305	288	1,812			

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated.						Number of miles of roads to be demarcated.		Remarks.
				Up to 31st March 1893.		In 1893-94.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward ...	1,057	837	458	1,320	310	2,985	768	4,305	288	1,812	
		1,122	837	488	1,320	310	2,985	798	4,305	323	1,812	
	II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED—*concluded.*											
	CENTRAL DIVISION.											
Poona District	Road from St. Patrick's Church, Poona, to Hingangaon (Poona-Sholápur road)	87	3,960	30	0	17	2,640	47	2,640	40	1,320	32 miles by aloe hedge and 15½ miles by stone.
	Total, Poona District ...	87	3,960	30	0	17	2,640	47	2,640	40	1,320	
Sholápur ...	Bársi-Yedsi road	20	0	18	0	.....		18	0	2	0	Portions lying in Bársi Municipal lands are not demarcated.
	Yedsi-Tadwala road	8	0	8	0	.....		8	0	.....		Earthen mounds.
	Total, Sholápur District ...	28	0	26	0	.....		26	0	2	0	
Násik ...	Bombay-Agra road	85	660	10	0	6	1,980	16	1,980	68	3,960	Original demarcation with square-headed stones. New demarcation with flat stones having semi-circular heads.
	Násik-Poona road	33	0	6	0	2	2,640	8	2,640	24	2,640	
	Násik-Balsár road	39	0	.....		2	0	2	0	37	0	Demarcation with flat stones with semicircular heads.
	Nándgaon-Aurangabad road ...	11	3,300	.....		3	3,960	3	3,960	7	4,620	
	Total, Násik District ...	168	3,960	16	0	14	3,300	30	3,300	138	660	

Ahmednagar	Road from the foot of the Imámpur Ghát to Toka	27	0	1	500	1	0	2	500	24	4,780	Partly stone and partly trench.
	Road from Ahmednagar to Paithan .	52	660	3	2,640	1	2,640	5	0	47	660	
	Total, Ahmednagar District ...	79	660	4	3,140	2	2,640	7	500	72	160	
Khándesh ...	Bombay-Agra road	106	0	77	0	12	0	89	0	17	0	Stones are ready for 14 miles.
	Dhulia-Chálisgaon road	34	0	34	0	.....		34	0	.....		
	Total, Khándesh District ..	140	0	111	0	12	0	123	0	17	0	
	TOTAL, CENTRAL DIVISION ...	503	3,300	187	3,140	46	3,300	234	1,160	269	2,140	
	SOUTHERN DIVISION.											
Dhárwár ...	Road from Havanur to Ekambi— Section from Háveri to Samasgi ...	28	1,320	24	5,105	3	1,495	28	1,320	.....		
	Road from Kárwár to Bellary— Section from Hubli to Gadag ...	34	0	32	3,300	1	1,980	34	0	.....		
	Do. Gadag to Hesrur...	29	0	.....		12	2,860	12	2,860	16	2,420	
	Road to connect Hulkoti Railway station to the Kárwár-Bellary road	0	3,300	0	3,300	.....		0	3,300	.....		
	Total, Dhárwár District ...	91	4,620	58	1,145	17	1,055	75	2,200	16	2,420	
Kánara ...	Road from Dhárwár Frontier near Yangatti to Kumpta *viâ* Sirsi ...	78	2,640	.....		4	5,230	4	5,230	73	2,690	Out of this 69 miles 1,944 feet are not required to be demarcated as they run through Government Forests.
	Total, Kánara District ...	78	2,640	.....		4	5,230	4	5,230	73	2,690	
	TOTAL, SOUTHERN DIVISION ...	170	1,980	58	1,145	22	1,005	80	2,150	89	5,110	
	TOTAL (II) ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED ...	739	0	275	4,285	68	4,305	344	3,310	394	1,970	
	Carried over ...	1,796	837	734	325	379	2,010	1,113	2,335	682	3,782	
	Carried over totals of I and II ...	1,796	837	734	325	379	2,010	1,113	2,335	682	3,782	

PROVINCIAL ROADS—*continued.*

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated.			Number of miles of roads to be demarcated.	Remarks.
			Up to 31st March 1893.	In 1893-94.	Total.		
		Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	
	Brought forward ...	1,796 837	734 325	379 2,010	1,113 2,335	682 3,782	
		1,796 837	734 325	379 2,010	1,113 2,335	682 3,782	
	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.						
	CENTRAL DIVISION.						
Násik	Nánáshighát road	4 0	.....	.....	.....	4 0	Flat stones with semicircular heads.
	Total, Násik District ...	4 0	.....	.....	.....	4 0	
	TOTAL, CENTRAL DIVISION ...	4 0	.....	.....	.....	4 0	
	SOUTHERN DIVISION.						
Belgaum ...	Road from Belgaum to Kárwár—Section from Belgaum to Shetowna	35 0	.....	14 0	14 0	21 0	21 miles are not required to be demarcated as they pass through Government Forest land, villages, towns, &c.
	Road from Devgad to Nipáni—Section from Dájipur to Nipáni on Poona-Bangalore road	38 3,960	.....	38 3,960	38 3,960	.....	
	Total, Belgaum District ...	73 3,960	.....	52 3,960	52 3,960	21 0	
Kánara ...	Road from Gairsapa to Falls and Talgupa	25 0	.....	.....	.....	25 0	Out of this 24 miles 2,745 feet are not required to be demarcated as they run through Government Forests.
	Road from Yellápur to Bankápur *viâ* Mundgad	29 0	.....	3 836	3 836	25 4,444	25 miles 4,444 feet do. do.
	Road from Sanikatta to Hebul ...	18 0	.....	7 1,345	7 1,345	10 3,935	10 ,, 3,935 ,, do. do.
	Koney Sea Slope road at Kárwár ..	1 2,844	.....	0 2,470	0 2,470	1 374	1 ,, 374 ,, do. do.
	Road from junction of Nolur deviation near Ballaguli to Ankola ...	3 3,960	.....	2 210	2 210	1 3,750	1 ,, 3,750 ,, do. do.

	Road from Haliyál to Supa... ...	20	2,640	.....		2	3,635	2	3,635	17	4,285	17	,, 4,285 ,,	do. do.
	Do. to Mavinkop ...	4	2,640	.....		2	1,620	2	1,620	2	1,020	2	,, 1,020 ,,	do. do.
	Total, Kánara District ...	102	1,524	.....		17	4,836	17	4,836	84	1,968			
	TOTAL, SOUTHERN DIVISION ...	176	204	.....		70	3,516	70	3,516	105	1,968			
	TOTAL (III) MURAM ROADS BRIDGED AND DRAINED THROUGHOUT	180	204	.....		70	3,516	70	3,516	109	1,968			
	IV.—MURAM ROADS DRAINED THROUGHOUT BUT THE LARGE RIVERS NOT BRIDGED.													
	NORTHERN DIVISION.													
Thána ...	Satowli Khind road	2	0	2	0	.....		2	0	.....				
	Medwan and Nanivli Khind roads...	10	0	10	0	.....		10	0	.....				
	Total, Thána District ...	12	0	12	0	.....		12	0	.....				
	TOTAL, NORTHERN DIVISION ...	12	0	12	0	.....		12	0	.....				
	CENTRAL DIVISION.													
Poona District .	Road from Dápuri to Ambeghargaon (Poona-Násik road)	53	0	15	0	2	0	17	0	36	0	By trench and aloe hedge.		
	Total, Poona District ...	53	0	15	0	2	0	17	0	36	0			
Sholápur ...	Poona-Hyderabad road— Section from river Bhima to Tandulvádi	75	0	75	0	.....		75	0	.....		By stones.		
	Sholápur-Bijápur road— Section from Sholápur to Tákli.	20	0	20	0	.....		20	0	.....				
	Cantonment roads	4	2,640	4	2,640	.....		4	2,640	.....				
	Kuslumb-Yermala road	8	0	8	0	.....		8	0	.....				
	Total, Sholápur District ...	107	2,640	107	2,640	.....		107	2,640	.....				
	Carried over ...	2,148	3,681	868	2,965	452	246	1,320	3,211	828	470			
	Carried over totals of I, II and III...	1,976	1,041	734	325	450	246	1,184	571	792	470			

PROVINCIAL ROADS—*continued.*

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated.						Number of miles of roads to be demarcated.		Remarks.
				Up to 31st March 1893.		In 1893-94.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward	1,976	1,041	734	325	450	246	1,184	571	792	470	
		2,148	3,681	868	2,965	452	246	1,320	3,211	828	470	
	IV.—MURAM ROADS DRAINED THROUGHOUT BUT THE LARGE RIVERS NOT BRIDGED—*concluded.*											
	CENTRAL DIVISION—*concluded.*											
Ahmednagar	Road from Ahmednagar to Pimpalgaon (Málegaon road)	66	0	1 & 16 miles on right. 18 „ on left ...		.....		1 & 16 miles on right. 18 „ on left ...		49 47	0 0	The figures given by the Executive Engineer refers to demarcation on both the sides of the same roads and therefore for sake of convenience the average is taken for totals.
	Road from Nandur-Shingota to Alley Khind (Násik-Poona Road)	37	0	1	0	4	0	5	0	32	0	Gutter and trench.
	Road from Jámgaon to Kotul ...	10	0	.....		10	0	10	0	.....		Stones.
	Road from Randha to Samrad ...	9	0	.....		9	0	9	0	.....		Do.
	Total, Ahmednagar District ...	122	0	19	0	23	0	42	0	80	0	
Khándesh ...	Dhulia-Surat road	86	0	25	2,640	1	0	26	2,640	59	2,640	Of this 49½ miles is fair weather road.
	Total, Khándesh District ...	86	0	25	2,640	1	0	26	2,640	59	2,640	
	TOTAL, CENTRAL DIVISION ...	368	2,640	167	0	26	0	193	0	175	2,640	
	SOUTHERN DIVISION.											
Dhárwár ...	Road from Havanur to Ekambi—Section from Havanur to Haveri.	22	0	.....		22	0	22	0	.....		
	Road from Anmod to Hemadgi—Section from Anmod at the head of the Tinai Ghát to Hemadgi towards Khánápur ...	6	0	6	0	.....		6	0	.....		

	Road from Dhárwár to Goa— Section from Dhárwár to Tinai Ghát	59	0	14	95	6	1,155	20	1,250	38	4,030	
	Total, Dhárwár District ...	87	0	20	95	28	1,155	48	1,250	38	4,030	
Bijápur ...	Road from Bijápur to Miraj— Section from Bijápur to Honwad..	24	3,300	12	2,830	9	3,300	22	850	2	2,450	The portion to be demarcated is within the town of Bijápur and within Municipal limits.
	Road from Sholápur to Hubli— Section from Tákli on the river Bhima to Konur on the Malaprabha	115	2,640	12	660	32	0	44	660	71	1,980	
	Road from Karád to Bijápur— Section from Nágaz to Tikote ...	14	2,640	9	1,320	5	1,320	14	2,640	.....		
	Total, Bijápur District ...	154	3,300	33	4,810	46	4,620	80	4,150	73	4,430	
Ratnágiri and Kolába.	Road from Alíbág to Kampoli ...	13	0	2	0	11	0	13	0	.....		
	Section from Alíbág to Dharamtar Road from Poladpur to Hathkambe.	94	2,640	40	1,320	*.....		40	1,320	54	1,320	* Rs. 113-4-9 have been spent in collecting stones, &c.
	Total, Ratnágiri and Kolába District	107	2,640	42	1,320	11	0	53	1,320	54	1,320	
Kánara ...	Road from Sirsi to Shimoga, *viâ* Banvási	19	1,320	.....		.....		.....		19	1,320	Out of this 13 miles and 1,828 feet are not required to be demarcated as they run through Government Forests.
	Road from Sadáshivgad to Goa Frontier	5	2,640	.....		4	3,420	4	3,420	0	4,500	4,500 feet do. do.
	Road from Shetavna to Kárwár, *viâ* Kadra and Unshi Ghát ...	52	0	.....		2	2,710	2	2,710	49	2,570	49 miles 2,570 feet do. do.
	Total, Kánara District ...	76	3,960	.....		7	850	7	850	69	3,110	
	TOTAL, SOUTHERN DIVISION ...	425	4,620	96	945	93	1,345	189	2,290	236	2,330	
	TOTAL (IV) MURAM ROADS DRAINED THROUGHOUT BUT THE LARGE RIVERS NOT BRIDGED ...	806	1,980	275	945	119	1,345	394	2,290	411	4,970	
	Carried over ...	2,782	3,021	1,009	1,270	569	1,591	1,578	2,861	1,204	160	
	Carried over totals of I, II, III and IV	2,782	3,021	1,009	1,270	569	1,591	1,578	2,861	1,204	160	

PROVINCIAL ROADS—*concluded.*

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated.						Number of miles of roads to be demarcated.		Remarks.
				Up to 31st March 1893.		In 1893-94.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward...	2,782	3,021	1,009	1,270	569	1,591	1,578	2,861	1,204	160	
		2,782	3,021	1,009	1,270	569	1,591	1,578	2,861	1,204	160	
	V.—VILLAGE OR CLEARED ROADS.											
	NORTHERN DIVISION.											
Ahmedabad ...	Road from Ahmedabad to Harsol (British portion)	23	0	11	0	7	3,960	18	3,960	4	1,320	
	Total, Ahmedabad District ...	23	0	11	0	7	3,960	18	3,960	4	1,320	
	TOTAL, NORTHERN DIVISION ...	23	0	11	0	7	3,960	18	3,960	4	1,320	
	CENTRAL DIVISION.											
Násik ...	Satighát road	5	0	.....		.....		.....		5	0	New demarcation with flat stones with semicircular heads having the letter B cut on one side and fixed at every half furlong on either side of road.
	Satighát-Harsul road	2	0	.....		.....		.....		2	0	
	Karanjali-Harsul road	18	0	.....		2	0	2	0	16	0	
	Total, Násik District ...	25	0	.....		2	0	2	0	23	0	
Ahmednagar ...	Road from Málegaon to Ambit ...	11	0	1	0	2	0	3	0	8	0	Stone.
	Total, Ahmednagar District ...	11	0	1	0	2	0	3	0	8	0	
	TOTAL, CENTRAL DIVISION ...	36	0	1	0	4	0	5	0	31	0	

	SOUTHERN DIVISION.												
Dhárwár ...	Hubli-Sholápur road—												
	Section from Konur to Hubli ...	40	2,640	21	3,960	18	1,320	40	0	0	2,640		
	Total, Dhárwár District ...	40	2,640	21	3,960	18	1,320	40	0	0	2,640		
Kánara ...	Road from Yellápur to Haliyal ...	27	0	.....		5	4,850	5	4,850	21	430	21 miles 430 feet are not required to be demarcated as they run through Government Forests.	
	Kundal Ghát approach ...	9	0	.....		.....		.....		9	0	9 miles	do. do.
	Dhokerpa Ghát approach ...	7	2,640	.....		.....		.....		7	2,640	7 miles 2640 feet	do. do.
	Kuveshi Ghát approach ...	11	0	.....		.....		.....		11	0	11 miles	do. do.
	Diggy Ghát approach	20	2,640	.....		.....		.....		20	2,640	20 miles 2,640 feet	do. do.
	Road from Kárka to Samjoda *viâ* Dandolli and Patelli	19	0	.....		0	3,800	0	3,800	18	1,480	18 miles 1,480 feet	do. do.
	Road from Yellápur to Ganeshgudi and Barballi	19	0	.....		0	1,710	0	1,710	18	3,570	18 miles 3,570 feet	do. do.
	Total, Kánara District ...	113	0	.....		6	5,080	6	5,080	106	200		
	TOTAL, SOUTHERN DIVISION ...	153	2,640	21	3,960	25	1,120	46	5,080	106	2,840		
	SIND DIVISION.												
Begári Canals...	Road from Jacobabad to Khaira Garhi	32	2,640	12	3,802	19	4,118	32	2,640	.....			
	TOTAL, SIND DIVISION ...	32	2,640	12	3,802	19	4,118	32	2,640	.....			
	TOTAL (V) VILLAGE OR CLEARED ROADS ...	245	0	46	2,482	56	3,918	103	1,120	141	4,160		
	GRAND TOTAL, PROVINCIAL ROADS	3,027	3,021	1,055	3,752	626	229	1,681	3,981	1,345	4,320		
	TOTAL OF I, II, III, IV AND V.	3,027	3,021	1,055	3,752	626	229	1,681	3,981	1,345	4,320		

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated.						Number of miles of roads to be demarcated.		Remarks.
			Up to 31st March 1893.		In 1893-94.		Total.				
		Ms. ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	LOCAL.										
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT.										
	NORTHERN DIVISION.										
Ahmedabad...	Ahmedabad to Bareja road ...	11 0	11	0	.....		11	0	.....		
	Road from Bowla to near Sábarmati Railway station, Ahmedabad ...	24 0	24	0	.....		24	0	.....		
	Road from Sarkhej to Sánand ...	9 0	9	0	.....		9	0	.....		
	Road from Sánand town to the Sánand Railway station ...	2 2,640	2	2,640	.....		2	2,640	.....		
	Total, Ahmedabad District ...	46 2,640	46	2,640	.....		46	2,640	.....		
Kaira and Panch Maháls.	Kaira and Mehmadabad road, including branches	11 1,320	11	1,320	.....		11	1,320	.....		
	Kaira and Sábarmati road, including branches	14 3,960	14	3,960	.....		14	3,960	.....		
	Nadiád and Vásna road, including branches	18 2,640	18	2,640	.....		18	2,640	.....		
	Barejri and Náika road, Kaira Section	9 2,640	9	2,640	.....		9	2,640	.....		Clearly demarcated by survey pillars and water channels.
	Do. do. Ahmedabad Section.	4 3,960	4	3,960	.....		4	3,960	.....		
	Petlád and Cambay road (British portion)	6 0	6	0	.....		6	0	.....		Demarcated by the Survey Department.
	Nadiád and Kapadvanj road ..	27 0	27	0	.....		27	0	.....		
	Dákor and Kapadvanj road ...	20 0	20	0	.....		20	0	.....		
	Vásad and Borsad road	11 1,320	11	1,320	.....		11	1,320	.....		
	Limkheda-Jhálod road (British portion)	14 2,640	.....		9	0	9	0	5	2,640	

	Godhra and Dohad road (British portion)	24	0	15	2,640	3	0	18	2,640	5	2,640	
	Total, Kaira and Panch Mahals District	161	2,640	138	2,640	12	0	150	2,640	11	0	
Surat and Broach.	Road from Anklesvar to Hánsot ...	13	2,640	13	2,640	.....		13	2,640	.....		
	Road from Anklesvar to Bore Bhátha	3	0	3	0	.....		3	0	.....		
	Road from Surat to Sachin... ...	7	2,640	4	0	3	2,640	7	2,640	.....		
	Road from Sachin to Lajpur ...	3	0	1	0	2	0	3	0	.....		
	Road from Kim to Tarkeshvar ...	9	0	9	0	.....		9	0	.....		
	Road from Tarkeshvar to Mándvi ...	18	0	18	0	.....		18	0	.....		
	Road from Surat to Bárdoli... ...	5	1,320	.....		.....		.....		5	1,320	In progress.
	Total, Surat and Broach District...	59	1,320	48	2,640	5	2,640	54	0	5	1,320	
Thána ...	Road from Chowk to Karjat ...	5	0	1	0	.....		1	0	4	0	
	Road from Bándra to Ghodbandar .	18	0	16	0	.....		16	0	2	0	
	Road from Sanján Railway station to Bandar	2	2,640	.....		.....		.....		2	2,640	
	Road from Wawji to Umbargaon ...	3	1,320	.....		.....		.....		3	1,320	
	Road from Dáhánu Railway station to Pawada Creek	1	1,320	.....		.....		.....		1	1,320	
	Road from Boisar to Chinchni ...	7	2,640	.....		6	2,640	6	2,640	1	0	
	Do. Bhiwndi to Kone ...	5	0	.....		1	2,640	1	2,640	3	2,640	
	Do. Sion to Trombay ...	6	0	.....		.....		.....		6	0	
	Do. Ghátkopar to Mahul ...	6	0	.....		.....		.....		6	0	
	Do. Verár to Agáshi ...	3	2,640	.....		.....		.....		3	2,640	
	Do. Wadowli to Sion-Trombay	0	2,800	.....		.....		.....		0	2,800	
	Do. Kurla to Kole Kalyán ...	0	1,400	.....		.....		.....		0	1,400	
	Pawai Village road	2	2,350	.....		.....		.....		2	2,350	
	Road from Kandivali to Bándra-Ghorbandar road	0	3,000	.....		.....		.....		0	3,000	
	Pokharan road	4	1,320	.....		.....		.....		4	1,320	
	Road from Kurla to Versowa ...	7	2,640	.....		1	0	1	0	6	2,640	
	Do. from Sáki to Vehár	3	0	.....		.....		.....		3	0	
	Do. from Bassein to Nirmal ...	5	2,640	2	0	.....		2	0	3	2,640	
	Do. from Pápdi to Gokhirwa ...	6	3,960	.....		3	2,640	3	2,640	3	1,320	
	Kusar Ghát road	6	0	.....		.....		.....		6	0	
	Road from Bhándup to Agra road...	0	3,025	.....		.....		.....		0	3,025	
	Road from Bhándup to Vehár ...	2	2,640	.....		.....		.....		2	2,640	
	Carried over ...	97	4,655	19	0	12	2,640	31	2,640	66	2,015	
		267	1,320	233	2,640	17	2,640	251	0	16	1,320	

LOCAL ROADS—*continued.*

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated.			Number of miles of roads to be demarcated.	Remarks.
			Up to 31st March 1893.	In 1893-94.	Total.		
		Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	
	Brought forward ...	267 1,320	233 2,640	17 2,640	251 0	16 1,320	
		97 4,655	19 0	12 2,640	31 2,640	66 2,015	
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT—*concluded.*						
	NORTHERN DIVISION—*concluded.*						
Thána ...	Road from Malád to Merwa ...	3 2,640	.....	.....	.....	3 2,640	
	Do. from Govindi to Sion Trombay.	0 3,100	.....	.....	.....	0 3,100	
	Do. from Maroli to Amik Chembur.	0 960	.....	.....	.....	0 960	
	Khandwati road	0 2,200	.....	.....	.....	0 2,200	
	Chinchiwali road	0 1,600	.....	.....	.....	0 1,600	
	Road from Thána to Ghodbandar ...	7 2,640	.....	.....	.....	7 2,640	
	Total, Thána District ...	110 1,955	19 0	12 2,640	31 2,640	78 4,595	
	TOTAL, NORTHERN DIVISION ...	377 3,275	252 2,640	30 0	282 2,640	95 635	
	CENTRAL DIVISION.						
Poona District	Road from Junnar to Náráyangaon .	9 0	2 2,640	.....	2 2,640	6 2,640	By trench and aloe hedge.
	Road from Poona to A'landi ...	9 0	4 1,320	0 2,640	4 3,960	4 1,320	
	Total, Poona District ...	18 0	6 3,960	0 2,640	7 1,320	10 3,960	
Násik ...	Násik-Trimbak road	17 2,640	.....	2 0	2 0	15 2,640	Flat stones with semicircular heads.
	Roads in and about Násik	2 0	.....	0 2,640	0 2,640	1 2,640	
	Shelbarighát road	3 0	.....	.....	.....	3 0	
	Total, Násik District ...	22 2,640	.....	2 2,640	2 2,640	20 0	

Khándesh ...	Chálisgaon station road ...	0	4,400	0	4,400	.....		0	4,400	.....	
	Chálisgaon Railway crossing road ...	0	3,800	0	3,800	.....		0	3,800	.....	
	Station road at Dhulia	9	0	.....		.....		.....		9	0
	Total, Khándesh District ...	10	2,920	1	2,920	.....		1	2,920	9	0
	TOTAL, CENTRAL DIVISION ...	51	280	8	1,600	3	0	11	1,600	39	3,960
	TOTAL (I) ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT	428	3,555	260	4,240	33	0	293	4,240	134	4,595
	II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.										
	NORTHERN DIVISION.										
Ahmedabad...	Road from Ahmedabad to Dholka up to Mile No. 8	8	0	8	0	.....		8	0	.....	
	Road from Dhandhuka to Ránpur ...	18	0	18	0	.....		18	0	.....	
	Dhandhuka-Gogo road (British portion)	30	0	30	0	.....		30	0	.....	
	Total, Ahmedabad District ...	56	0	56	0	.....		56	0	.....	
Surat and Broach.	Road from Broach to Jambusar ...	29	0	29	0	.....		29	0	.....	
	Road from Hope Bridge approach to Bhátha (Surat)	4	2,640	2	0	2	2,640	4	2,640	.....	
	Total, Surat and Broach District ...	33	2,640	31	0	2	2,640	33	2,640	.....	
Thána ...	Road from Kalyán to Málsej Ghát...	35	0	32	0	3	0	35	0	.....	
	Road from Kalyán to Dhysar ...	9	0	9	0	.....		9	0	.....	
	Road from Kalwa to Belápur ...	7	0	7	0	.....		7	0	.....	
	Road from Máhim to Váda ...	33	0	23	0	6	0	29	0	4	0
	Road from Bhyndar to Utan ...	6	0	4	2,640	.....		4	2,640	1	2,640
	Road from Bhiwndi to Váda ...	25	2,640	25	2,640	.....		25	2,640	.....	
	Total, Thána District ...	115	2,640	101	0	9	0	110	0	5	2,640
	TOTAL, NORTHERN DIVISION ...	205	0	188	0	11	2,640	199	2,640	5	2,640
	Carried over ...	633	3,555	448	4,240	44	2,640	493	1,600	140	1,955
	Carried over total of I ...	428	3,555	260	4,240	33	0	293	4,240	134	4,595

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated.						Number of miles of roads to be demarcated.		Remarks.
				Up to 31st March 1893.		In 1893-94.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward ...	428	3,555	260	4,240	33	0	293	4,240	134	4,595	
		633	3,555	448	4,240	44	2,640	493	1,600	140	1,955	
	II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED—*concluded.*											
	Central Division.											
Poona District	Road from Poona to Paud ...	17	2,640	5	0	0	2,640	5	2,640	12	0	By trench and hedge.
	Road from Poona to Singhar Fort...	13	0	7	0	1	0	8	0	5	0	
	Total, Poona District ...	30	2,640	12	0	1	2,640	13	2,640	17	0	
Násik ...	Ghoti Barighat road	13	1,320	.....		2	0	2	0	11	1,320	Flat stones with semicircular heads.
	Total, Násik District ...	13	1,320	.....		2	0	2	0	11	1,320	
Khándesh ...	Sávda Gátha road	3	0	.....		1	2,640	1	2,640	1	2,640	Stones are ready for 1½ miles.
	Total, Khándesh District ...	3	0	.....		1	2,640	1	2,640	1	2,640	
	Total, Central Division ...	46	3,960	12	0	5	0	17	0	29	3,960	

	SOUTHERN DIVISION.										
Bijápur ...	Bágalkot-Hungund road ...	27	2,640	5	1,320	.....		5	1,320	22	1,320
	Guledgud-Katgeri road ...	6	2,640	6	2,640	.....		6	2,640	.....	
	Total, Bijápur District ...	34	0	11	3,960	.....		11	3,960	22	1,320
	TOTAL, SOUTHERN DIVISION ...	34	0	11	3,960	.....		11	3,960	22	1,320
	TOTAL (II) ROADS METALLED AND DRAINED THROUGHOUT BUT THE LARGE RIVERS NOT BRIDGED	285	3,960	211	3,960	16	2,640	228	1,320	57	2,640
	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.										
	NORTHERN DIVISION.										
Kaira and Panch Maháls.	Godhra and Khakheria road, including branch to Godhra Railway station	24	1,320	24	1,320	.....		24	1,320	.....	
	Kálol and Chámpáner road ...	9	0	9	0	.....		9	0	.....	
	Chámpáner and Jámbughoda road (British portion)	9	0	9	0	.....		9	0	.....	
	Total, Kaira and Panch Maháls District	42	1,320	42	1,320	.....		42	1,320	.....	
Surat and Broach.	Road from Bulsár to Dharampor ...	15	2,640	15	2,640	.....		15	2,640	.....	
	Road from Bulsár to Párdi *viâ* Pár river	6	2,640	6	2,640	.....		6	2,640	.....	
	Road from Domas Kentish Junction to Gavier...	4	2,640	2	0	2	2,640	4	2,640	.....	
	Carried over ...	26	2,640	24	0	2	2,640	26	2,640	.....	
		756	3,555	514	4,240	49	2,640	564	1,600	192	1,955
	Carried over totals of I and II...	714	2,235	472	2,920	49	2,640	522	280	192	1,955

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated.			Number of miles of roads to be demarcated.	Remarks.
			Up to 31st March 1893.	In 1893-94.	Total.		
		Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	
		714 2,235	472 2,920	49 2,640	522 280	192 1,955	
	Brought forward ...	756 3,555	514 4,240	49 2,640	564 1,600	192 1,955	
		26 2,640	24 0	2 2,640	26 2,640	.....	
	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT—*concluded.*						
	NORTHERN DIVISION—*concluded.*						
Surat and Broach—*concluded.*	Road from Ránder to Olpád ...	8 2,640	8 2,640	.....	8 2,640	.....	
	Do. Surat Railway station to Varachha	3 2,640	.....	.....	.....	3 2,640	In progress.
	Total, Surat and Broach District ...	38 2,640	32 2,640	2 2,640	35 0	3 2,640	
	TOTAL, NORTHERN DIVISION ...	80 3,960	74 3,960	2 2,640	77 1,320	3 2,640	
	CENTRAL DIVISION.						
Sholápur ...	Jeur-Karmála road	11 0	11 0	.....	11 0	.....	By stones.
	Bársi Station-Pandharpur road ...	31 0	.....	29 0	29 0	2 0	Do. the work has been suspended for want of a revenue surveyor from the Collector's office.
	Pandharpur-Janoni road ...	41 0	.....	.....	.....	41 0	
	Total, Sholápur District ...	83 0	11 0	29 0	40 0	43 0	

Ahmednagar	Shrigonda-Kashti road ...	8	0	8	0	.....		8	0	.....		
	Shrigonda-Vadgaon road *viâ* Pimpri Railway station ...	7	0	6	0	0	2,640	6	2,640	0	2,640	Gutter.
	Road from Párner to Chincholi ...	5	0	1	0	1	1,320	2	1,320	2	3,960	Partly stones and partly trench.
	Do. from Karjat to Chincholi ...	6	2640	2	0	0	2,640	2	2,640	4	0	Gutter.
	Do. from Jámkhed to Moho Ghát.	5	0	5	0	.....		5	0	.....		
	Ráhuri station and branch feeder roads	3	0	2	0	1	0	3	0	.....		Gutter and stones.
	Road from Rahata to Chitali Railway station...	10	0	1	0	.....		1	0	9	0	Stones.
	Do. from Kopargaon to Signápur .	2	2,640	2	0	.....		2	0	0	2,640	Do.
	Belwandi feeder road	3	0	3	0	.....		3	0	.....		Gutters.
	Road from Khospuri to Ismálpur ...	12	2,640	12	2,640	.....		12	2,640	.....		Trench.
	Do. from Loni to Belápur Railway station	14	0	14	0	.....		14	0	.....		Gutter and trench.
	Do. from the Belápur town to the Belápur Railway station ...	4	0	4	0	.....		4	0	.....		Do.
	Total, Ahmednagar District ...	80	2,640	60	2,640	3	1,320	63	3,960	16	3,960	
Khándesh ...	Máheji station road	2	2,640	2	2,640	.....		2	2,640	.....		
	Bhadgaon-Talváda road	9	0	.....		9	0	9	0	.....		
	Cross road at Erandole	1	2,640	.....		1	2,640	1	2,640	.....		
	Total, Khándesh District ...	13	0	2	2,640	10	2,640	13	0	.....		
	TOTAL, CENTRAL DIVISION ...	176	2,640	74	0	42	3,960	116	3,960	59	3,960	
	SOUTHERN DIVISION.											
Dhárwár ...	Navalgund-Annigiri road ...	11	2,640	11	2,640	.....		11	2,640	.....		
	Dhárwár-Haliyál road	17	0	17	0	.....		17	0	.....		
	Total, Dhárwár District ...	28	2,640	28	2,640	.....		28	2,640	.....		
	TOTAL, SOUTHERN DIVISION ...	28	2,640	28	2,640	.....		28	2,640	.....		
	TOTAL (III) MURAM ROADS BRIDGED AND DRAINED THROUGHOUT	285	3,960	177	1,320	45	1,320	222	2,640	63	1,320	
	Carried over ...	1,000	915	649	4,240	94	3,960	744	2,920	255	3,275	
	Carried over totals of I, II and III.	1,000	915	649	4,240	94	3,960	744	2,920	255	3,275	

Executive charges.	Names of roads.	Length of road.	Number of miles of roads demarcated. Up to 31st March 1893.	In 1893-94.	Total.	Number of miles of roads to be demarcated.	Remarks.
		Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	Ms. ft.	
	Brought forward ...	1,000 915	649 4,240	94 3,960	744 2,920	255 3,275	
		1,000 915	649 4,240	94 3,960	744 2,920	255 3,275	
	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.						
	NORTHERN DIVISION.						
Thána ...	Road from Ambadi to Wajreshvari	4 2,640	.....	1 1,053	1 1,053	3 1,587	This road is not constructed but surveyed only and land is not acquired.
	Total, Thána District ...	4 2,640	.....	1 1,053	1 1,053	3 1,587	
Kaira and Panch Maháls.	Godhra and Shera road	14 0	14 0	.....	14 0	.....	
	Oodwada and Sunth road	20 0	20 0	.....	20 0	.....	
	Total, Kaira and Panch Maháls District	34 0	34 0	.....	34 0	.....	
	TOTAL, NORTHERN DIVISION ...	38 2,640	34 0	1 1,053	35 1,053	3 1,587	
	CENTRAL DIVISION.						
	Road from Talegaon to Railway station...	1 1,320	0 2,640	.....	0 2,640	0 3,960	Trench and partly prickly-pear hedges and aloe.
	Do. from Hadapsar to Nira Bridge (old Sátára road)	38 4,224	10 2,640	1 0	11 2,640	27 1,584	Aloe hedge.
	Do. from Wadgaon to Shikrápur...	33 0	9 2,640	1 2,640	11 0	22 0	Trench and do. do.
	Do. from Kárli Railway station to join Bombay Mail road ...	1 2,640	.....	.....	.....	1 2,640	
	Do. from Pátas to Pátas Railway station	3 1,320	1 1,320	0 3,960	2 0	1 1,320	1¼ mile aloe hedge and ¾ mile by stone on one side.

Poona	Do. from Bárámati to Khanota ...	21	0	3	4,620	1	0	4	4,620	16	660	3½ aloe hedge and 1 mile by stone on both sides.
	Do. from Nira Bridge to Sirúr ...	55	3,960	8	0	1	0	9	0	46	3,960	By aloe hedge.
	Do. from Khed to Pábal	12	0	5	0	1	0	6	0	6	0	Trench and prickly-pear and aloe hedge.
	Do. from Khed to Bhorgiri ...	31	0	12	0	.....		12	0	19	0	Do. do.
	Do. from Manchár to Ghoda ...	8	0	6	0	.....		6	0	2	0	Do. do.
	Do. from Junnar to Rájur ...	6	0	2	1,320	.....		2	1,320	3	3,960	By trench and aloe hedge.
	Do. from Diksál Railway station to join Sholápur road ...	1	1,320	1	0	0	1,320	1	1,320	.....		1 mile stones on one side and aloe fencing on the other and ½ mile stones on one side.
	Do. from Lánowli to Sakarpathar.	3	0	.....		.....		.....		3	0	
	Do. from Yewat Railway station.. to join the Sholápur road...	1	1,320	.....		.....		.....		1	1,320	
	Do. from Loni to Chandgaon ...	4	0	.....		.....		.....		4	0	
	Do. from Chinchwad to Railway station	1	1,320	.....		.....		.....		1	1,320	
	Do. from Loni to Pabal ...	15	0	.....		.....		.....		15	0	
	Do. from Indápur to Bárámati ...	31	0	.....		.....		.....		31	0	
	Do. from village of Mundwa to the proposed station on the G. I. P. Line	0	3,692	.....		.....		.....		0	3,692	
	Do. from Loni Kalbhar, G. I. P. R., to join Sholápur road ...	0	412	.....		.....		.....		0	412	By trench and partly prickly-pear hedge and aloe.
	Do. from Ghoda to Ambegaon ...	10	4,100	10	2,640	.....		10	2,640	0	1,460	
	Total, Poona District ...	279	4,508	70	1,980	6	2,640	76	4,620	202	5,168	
	Násik-Dindori and Kalvan road.											
Násik	In Peint sub-division	24	0	.....		2	0	2	0	22	0	
	In Satána do.	20	0	.....		3	660	3	660	16	4,620	
	Khándesh and Nizám's Frontier road.											
	In Yeola sub-division	52	0	.....		.....		.....		52	0	
	In Satána do.	30	0	.....		3	1,320	3	1,320	26	3,960	Flat stones with semicircular heads.
	Satána-Málegaon road... ...	23	0	1	0	3	1,320	4	1,320	18	3,960	
	Nasik-Wagheda road	22	0	.....		3	0	3	0	19	0	
	Nánáshighát-Barhi road ...	11	0	.....		1	0	1	0	10	0	
	Harsul-Goldari road	10	0	.....		2	0	2	0	8	0	
	Cherraibári road	1	0	.....		.....		.....		1	0	
	Total, Násik District ...	193	0	1	0	17	3,300	18	3,300	174	1,980	
	Carried over ...	1,511	2,783	755	940	120	393	875	1,333	636	1,450	
	Carried over totals of I, II and III.	1,000	915	649	4,240	94	3,960	744	2,920	255	3,275	

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated.						Number of miles of roads to be demarcated.		Remarks.
				Up to 31st March 1893.		In 1893-94.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward ...	1,000	915	649	4,240	94	3,960	744	2,920	255	3,275	
		1,511	2,783	755	940	120	393	875	1,333	636	1,450	
	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED —*continued.*											
	CENTRAL DIVISION—*concluded.*											
Ahmednagar	Road from Ahmednagar to Jámkhed.	20	3,960	15	0	0	3,960	15	3,960	5	0	Gutters and trees.
	Do. from Kolhár to Bári	65	0	2	0	.....		2	0	63	0	Stones.
	Do. from Supa to Pimpalgaon Dipa	47	3,960	15	2,640	6	0	21	2,640	26	1,320	Partly stone and partly trench.
	Do. from Supa to Sárola	8	0	1	2,640	3	0	4	2,640	3	2,640	Do. do.
	Do. from Nagar to Takli-Khándeshvar	39	1,320	27	0	2	0	29	0	10	1,320	Partly gutter and partly trees.
	Do. from Tisgaon to Páthardi ...	7	1,320	7	1,320	.....		7	1,320	.....		Gutter and trench.
	Do. from Khadke on Ahmednagar-Toka road to Belápur Railway station *viâ* Nevása ...	24	0	21	0	.....		21	0	3	0	Do.
	Do. from Ahmednagar to Shevgaon	40	0	0	875	.....		0	875	39	4,405	Trench.
	Do. from Kharda to Shrigonda ...	66	0	30	0	0	2,640	30	2,640	35	2,640	Gutter.
	Do. from Shendi to Vámbori ..	8	2,640	0	1,320	0	2,640	0	3,960	7	3,960	Stones.
	Do. Nevása to Badhegaon *viâ* Shevgaon	25	0	21	0	0	2,640	21	2,640	3	2,640	Trench.
	Total, Ahmednagar District ...	351	2,640	140	3,515	13	1,320	153	4,835	197	3,085	

Khándesh ...	Mhásvad-Dhulia road	46	0	20	0	11	1,320	31	1,320	14	3,960	Stones are ready for 8 miles.
	Erandole-Dharangaon-Chopda road .	18	1,320	6	3,960	.....		6	3,960	11	2,640	Do. for 2 do.
	Jalgaon-Dharangaon road ...	19	2,640	10	2,640	.....		10	2,640	9	0	Do. for 3 do.
	Kajgaon-Párola road	22	660	4	0	8	0	12	0	10	660	Do. for 5 do.
	Songir-Nandurbár road ...	44	3,960	22	0	.....		22	0	22	3,960	Do. for 14½ do.
	Dondaicha-Sháháda road ...	17	0	4	0	.....		4	0	13	0	Do. for 2½ do.
	Chálisgaon-Outrámghát road ...	13	1,320	13	1,320	.....		13	1,320	.....		
	Páchora-Bhadgaon road ...	8	1,980	8	1,980	.....		8	1,980	.....		
	Junction road at Bhadgaon ...	1	1,320	1	1,320	.....		1	1,320	.....		
	Dhulia-Amalner road	18	1,320	11	0	7	1,320	18	1,320	.....		
	Shirpur Branch road	2	0	.....		.....		.....		2	0	
	Jalgaon-Neri road	14	0	4	0	.....		4	0	10	0	
	Neri-Jámner road	8	1,320	.....		.....		.....		8	1,320	Stones are ready for 4 miles.
	Nasirabad-Bhadli road... ..	1	2,640	.....		1	0	1	0	0	2,640	
	Bhusával-Yával road	10	0	8	0	.....		8	0	2	0	
	Do. Sakegaon road ...	3	3,960	.....		1	1,320	1	1,320	2	2,640	Stones are ready for 1 mile.
	Sákri-Pimpalner road	13	2,640	2	1,320	0	1,320	2	2,640	11	0	Do. for 11 miles.
	Total, Khándesh District ...	261	3,960	115	1,980	29	0	144	1,980	117	1,980	
	TOTAL, CENTRAL DIVISION ...	1,086	548	327	2,195	66	1,980	393	4,175	692	1,653	
	SOUTHERN DIVISION.											
Bijápur ...	Bijápur-Sindgi road	35	2,640	6	2,640	.....		6	2,640	29	0	
	Road from Indi to Indi road station	3	1,760	3	1,760	.....		3	1,760	.....		
	Sholápur-Belláry road	92	2,640	0	4,500	.....		0	4,500	91	3,420	Only a portion of this road from Indi to Tambe, 13 miles, is in charge of this department.
	Almel-Pandharpur road	48	0	1	2,640	.....		1	2,640	46	2,640	
	Carried over	179	1,760	12	980	.....		12	980	167	780	
		2,124	4,108	1,011	1,155	162	1,713	1,173	2,868	951	1,235	
	Carried over totals of I, II and III ...	1,000	915	649	4,240	94	3,960	744	2,920	255	3,275	

LOCAL ROADS—*continued.*

Executive charges.	Names of roads.	Length of road.		Number of miles of roads demarcated.				Number of miles of roads to be demarcated.		Remarks.
				Up to 31st March 1893.		In 1893-94.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
	Brought forward ...	1,000	915	649	4,240	94	3,960	744	2,920	255	3,275	
		2,124	4,103	1,011	1,155	162	1,713	1,173	2,868	951	1,235	
	IV.—MURAM ROADS DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED —*concluded.*	179	1,760	12	980	.....		12	980	167	780	
	SOUTHERN DIVISION—*concluded.*											
Bijápur—*concluded.*	Muddebihál-Almati road	19	2,640	17	0	.....		17	0	2	2,640	
	Havin-Hippargi-Telgi road ...	19	2,640	8	3,280	.....		8	3,280	10	4,640	
	Total, Bijápur District ...	218	1,760	37	4,260	.....		37	4,260	180	2,780	
	TOTAL, SOUTHERN DIVISION ...	218	1,760	37	4,260	.....		37	4,260	180	2,780	
	TOTAL (IV) MURAM ROADS DRAINED THROUGHOUT BUT THE LARGE RIVERS NOT BRIDGED	1,342	4,948	399	1,175	67	3,033	466	4,208	876	740	
	V.—VILLAGE OR CLEARED ROADS.											
	NORTHERN DIVISION.											
Kaira and Panch Maháls.	Godhra and Páli road	16	0	16	0	.....		16	0	.....		
	Páli and Bálásinor road	8	1,320	8	1,320	.....		8	1,320	.....		Demarcated by the Survey Department.
	Total, Kaira and Panch Maháls ...	24	1,320	24	1,320	.....		24	1,320	.....		
	TOTAL, NORTHERN DIVISION ...	24	1,320	24	1,320	.....		24	1,320	.....		

	Central Division.											
Poona District	Road from foot of Sákarpáthar to Bhorkus	8	2,640	.....		.....		.....		8	2,640	
	Do. from Náráyenpeth to Kapurwhal...	7	2,692	.....		.....		.....		7	2,692	
	Do. from Bhorgiri to Bhimashankar	4	2,246	.....		.....		.....		4	2,246	
	Total, Poona District ...	20	2,298	.....		.....		.....		20	2,298	
Ahmednagar	Road from Thugaon to Kotul ...	11	0	1	0	1	0	2	0	9	0	Stones.
	Do. from Párner to Jámgaon Tákli *viâ* Jámgaon	12	0	4	0	0	1,320	4	1,320	7	3,960	Partly stone and partly trench.
	Do. from Arungaon to Wálki ...	5	0	3	0	1	3,960	4	3,960	0	1,320	Stones.
	Total, Ahmednagar District ...	28	0	8	0	3	0	11	0	17	0	
	Total, Central Division ...	48	2,298	8	0	3	0	11	0	37	2,298	
	Southern Division.											
Ratnágiri and Kolába.	Road from Pen to Khárápáda ...	7	0	1	0	6	0	7	0	.....		
	Do. from Alibág to Rewas ...	15	0	3	0	12	0	15	0	.....		
	Total, Ratnágiri and Kolába District..	22	0	4	0	18	0	22	0	.....		
	Total, Southern Division ...	22	0	4	0	18	0	22	0	.....		
	TOTAL (V) VILLAGE OR CLEARED ROADS	94	3,618	36	1,320	21	0	57	1,320	37	2,298	
	GRAND TOTAL, LOCAL ROADS.	2,437	4,201	1,085	1,455	183	1,713	1,268	3,168	1,169	1,033	
	TOTAL OF I, II, III, IV and V ...	2,437	4,201	1,085	1,455	183	1,713	1,268	3,168	1,169	1,033	

APPENDIX F.

ROAD MAP

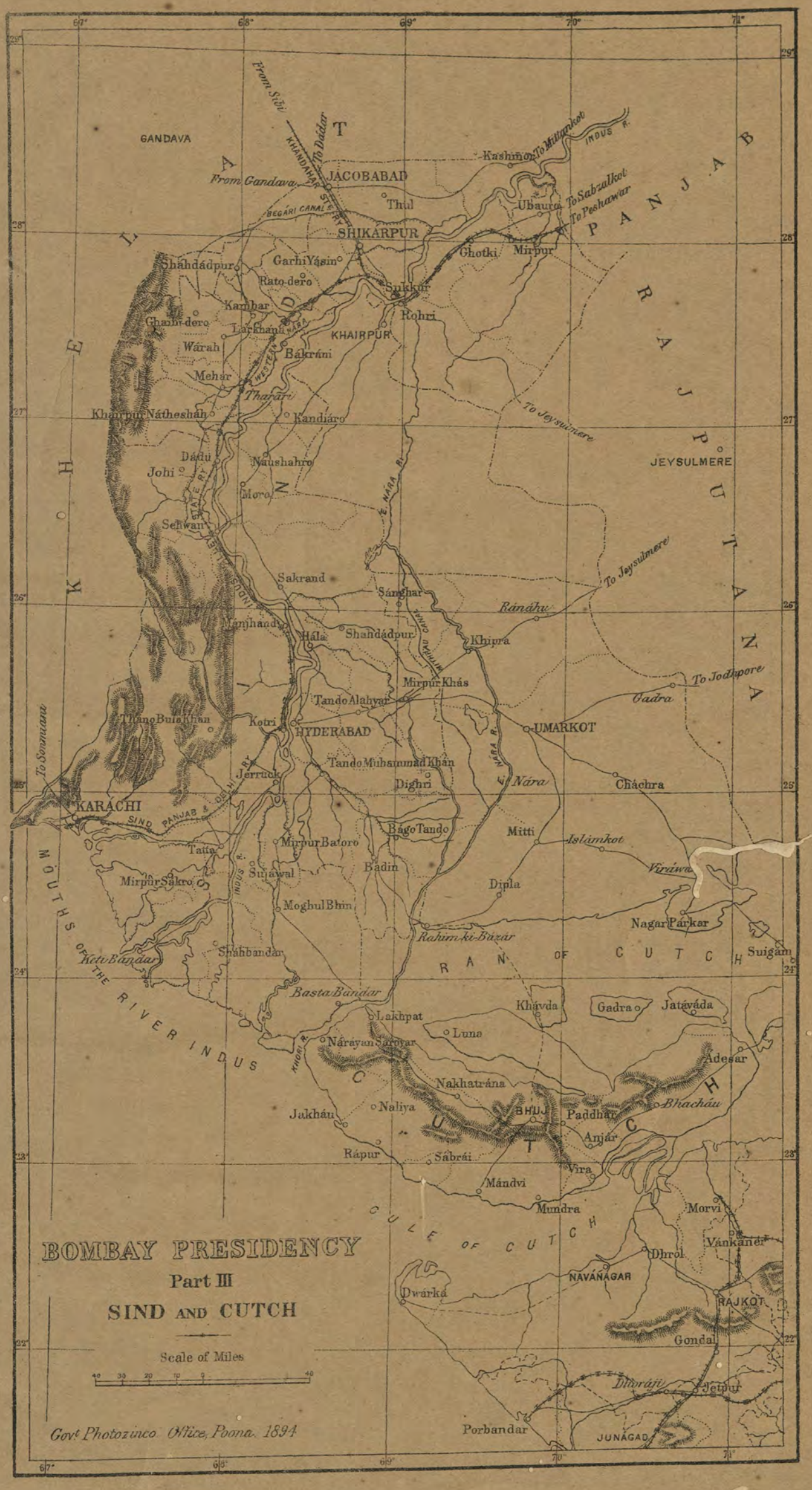
(IN 3 SHEETS), SHOWING THE PRINCIPAL LINES OF ROAD IN PROGRESS

DURING THE YEAR

1893-94.

BOMBAY PRESIDENCY
Part I.
GUJÁRAT AND THE TÁPTI VALLEY
Scale of Miles
40 30 20 10 0 40
Govt Photozinco. Office, Poona, 1894
RAN OF CUTCH
GULF OF CUTCH
KATHIAWAR
GULF OF CAMBAY
CENTRAL INDIA AGENCY
BERAR
CENTRAL PROV.
Mount Abu
OODEYPORE
Dhanera
Tharád
Rahim-ki-Bázár
Suigám
Diodar
Deesa
PÁLANPUR
Posina
Danta
Pol
DUNCARPUR
BANSWARA
Lakhpat
Khávda
Thara
RADHANPUR
Sántalpur
Pátan
Keralu
IDAR
Ahmednagar
Mehsana
Munjpur
Mansa
Parantij
Modasa
Dhansara
Kadi
SADRA
SUNTH
LUNAVADA
Uhlod
Jakhán
BHUJ
Bhachau
Pátri
Dhuliakot
Viramgám
AHMEDABAD
Kapadvanj
Mándvi
Morvi
DHRANGADRA
Sánand
Bareja
KAIRA
GODHRA
Dobad
To Ratlam
To Mhow
JHABUA
INDORE
To Agra
Wadhwán
Dholka
Matar
Nadiad
Umreth
Kalol
BÁRIYA
DHAR
AMJHERA
MHOW
Dhrol
Vánkaner
Limbdi
Petlad
Borsad
Halol
NÁRUKOT
Dwárka
NAVANAGAR
CAMBAY
BARODA
CHHOTA OODEYPORE
To Mhow
RÁJKOT
Dhandhaka
Jambusar
Bahádarpur
Gondal
Amod
Chándod
NARBADA R.
BARWANI
To Jabalpur
Vágra
NÁNDOD
KHANDWA
KHARGON
Porbandar
JUNÁGAD
Amreli
Pálitana
BHÁVNAGAR
Gogha
BROACH
Ankleśvar
Taloda
Shahada
Hansot
Olpád
Shirpur
Nandurbar
Mándvi
Dondaicha
Chopda
Yával
Sávda
SURAT
Bardoli
Amalner
Jalgaon
Dátia
SACHIN
Jalalpur
Pimpalner
DHULIA
Erandol
Bhusaval
To Nagpur
Veraval
Jáfarabad
Chikhli
BÁNSDA
Parola
Mhasavád
Jámner
Diu
SURGANA
Bhadgaon

BOMBAY PRESIDENCY
Part II
THE DECCAN, KONKAN AND KARNÁTIC
Scale of Miles
Govt Photozinco Office Poona 1894
SACHIN
DHULIA
Bhusaval
Pimpalner
Jámner
Bulsár
Párdi
DAMAN
BANSDA
SURGANA
DHARAMPOR
Satána
Málegaon
Bhadgaon
Páchora
Kalvan
Ajanta
Chálisgaon
Chándor
Pimpalgaon Basvant
Nándgaon
Umbargaon
Dindori
Vinchur
Niphád
Yeola
Dahanu
NASIK
Kopargaon
Tárápur
Jawhar
Simar
AURANGABAD
Máhim
Shirghát
Igatpuri
Sangamner
Bandra
Akola
Nevása
Ágáshi
Bassein
Bhiwndi
Sháhápur
Rahuri
Shevgaon
Kalyan
Murbád
THANA
Jumnar
BOMBAY
Ambegaon
Chodá
AHMEDNAGAR
Colaba
Uran
Karjat
Khed
Parner
Pen
Khadkala
Sirur
Jámkhed
ALIBÁG
Chaul
Roha
Shrigonda
Kuarda
Karjat
MURUD
JANJIRA Ft
POONA
Karmála
Mángaon
Sásvad
Supa
Barsi
Bánkot
Mahad
Indápur
Madha
PHALTAN
Harnai
Wai
Dápoli
Médha
Málsiras
Dahivádi
Pándharpur
To Hyderabad
Khed
SATÁRA
Vadúj
SHOLÁPUR
Wagadári
Anjanvel
Chiplún
Patan
Sángola
Mangalvedha
Atpádi
Jaygad
Karád
Vita
To Madras
Sangameshvar
Indi
RATNÁGIRI
Tásgaon
JATH
Peth
Devrukh
SÁNGLI
Sindgi
MIRÁJ
BIJÁPUR
Rájápur
KOLHÁPUR
KURUNDVÁD
Athni
Bágevádi
Vizíadurg
JAMKHANDI
Devgad
Nipani
Muddebihál
MUDHOL
Gad Hinglaj
Gokák
Kaládgi
Bágalkot
Málvan
RÁMDURG
Hungund
Vengurla
SAVANTVÁDI
BELGAUM
Bádami
Saundatti
Bagárda
Sampgaon
Ron
Mapuça
Khánápur
Navalgund
RANJIM
Goa
DHÁRWÁR
Hubli
Annigeri
Gadag
To Belluri
Mormugão
Supa
Hahvál
Shirhatti
Nimbal
Margão
Kundgol
Kalghatgi
Lakshmeshvar
Shiggaon
SAVANUR
Yellápur
KÁRWÁR
Karajgi
Hangal
Haveri
Ránebennur
Ankola
Sirsi
To Bangalore
Hirekerur
Kumta
Honávar
Siddápur
Telguppa
Gersoppa
Bhatkal
MAISUR
MADRAS PRESY
BERAR
KHANDESH
NIZAM'S DOMINIONS
SAHYADRI MTS
KONKAN
BALAGHAT
GODAVARI R.
KRISHNA R.
BHIMA R.
NIRA RIVER
PRAVARA R.
MULA R.
MUTHA R.
KUKDI R.
GHATPRABHA R.
MALPRABHA R.
KALINADI R.
TUNGBHADRA R.
HARIHAR
RAILWAY
BORE
DAPURI BRIDGE


BOMBAY PRESIDENCY
Part III
SIND AND CUTCH
Scale of Miles
40 30 20 10 0 40
Govt Photozinco Office, Poona. 1894
GANDAVA
JACOBABAD
SHIKARPUR
KHAIRPUR
HYDERABAD
KARÁCHI
UMARKOT
JEYSULMERE
BHUJ
NAVÁNAGAR
RÁJKOT
JUNÁGAD
Porbandar
Dwarka
Mándvi
Mundra
Anjár
Gondal
Jetpur
Dhrol
Morvi
Vánkaner
Adesar
Nagar Párkar
Suigam
Islámkot
Mitti
Diplá
Badin
Tatta
Sujáwal
Mirpur Sakro
Shahbandar
Keti Bándar
Basta Bándar
Lakhpat
Luna
Khávda
Gadra
Jatáváda
Bhachau
Paddhar
Naliya
Jakhán
Rápur
Sábrái
Vira
Nakhatrána
Rahim-ki-Bázar
Chachra
Dighri
Tando Muhammad Khán
Tando Alahyar
Mirpur Khás
Khipra
Shandádpur
Hála
Mánjhand
Sakrand
Sánghar
Ránáhu
Naushahro
Moro
Sehwan
Dádu
Johi
Khairpur Nátheshah
Kandiáro
Tharári
Bákráni
Wárah
Mehar
Larkhana
Kambar
Ghanhi dero
Shahdádpur
Garhi Yásin
Rato dero
Sukkur
Rohri
Ghotki
Mirpur
Ubaura
Thul
Kashmor
From Gandava
From Sibi
To Dádar
To Millankot
To Sabzalkot
To Peshawar
To Jeysulmere
To Jodhpore
To Somiana
Cadra
Chhor
Viráwa
Rann of Cutch
Gulf of Cutch
Mouths of the River Indus
Indus R.
Khandahar State Ry.
Begári Canal
Western Nára
E. Nára R.
Mithráv Canal
Indus Valley State Ry.
Sind Panjab & Delhi Ry.
Khori R.
Kotri
Jerruck
Mirpur Batoro
Bágo Tando
Sindh
Panjab
Rajputana

SUPPLEMENT

TO THE

ADMINISTRATION REPORT OF CIVIL WORKS

OF THE

PUBLIC WORKS DEPARTMENT,

BOMBAY PRESIDENCY,

FOR THE YEAR 1893-94.

133351

B 575—a

STATEMENT

OF

LOCAL FUND AND MUNICIPAL ROADS

FOR THE YEAR

1893-94.

B 575—b

Statement showing the Extension and Progress of LOCAL FUND ROADS maintained by Civil Agency in the Bombay Presidency for the year 1893-94.

Districts.	Classification and Names of Roads.	Length in Miles. Completed.	In progress.	Total.	Average total Cost of construction per Mile.	Average annual Cost of Maintenance and Repairs in the last five years.	Remarks.
		Ms. ft.	Ms. ft.	Ms. ft.	Rs.	Rs.	
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT.						
	NORTHERN DIVISION.						
	Bassein.						
Thána	Páli Road	0 1,320	.....	0 1,320	60	30	
	Total, Thána District ...	0 1,320	.....	0 1,320	.....	.....	
	Karjat.						
Kolába	Khálápur Mail Road	0 2,500	.....	0 2,500	.....	76	
	Total, Kolába District ...	0 2,500	.....	0 2,500	.....	.....	
Surat	A portion of road from Bárdoli to Surat in British Territory ...	0 2,500	.....	0 2,500	*3,105	.....	*On 2,500 feet Rs. 1,407.
	Total, Surat District ...	0 2,500	.....	0 2,500	.....	.....	
	TOTAL, NORTHERN DIVISION ...	1 1,040	.....	1 1,040	.....	.....	
	Total, (I)—Roads metalled, bridged and drained throughout...	1 1,040	.....	1 1,040	.....	.....	
	Carried over ...	1 1,040	.....	1 1,040	.....	.....	
	Carried over Total of I ...	1 1,040	.....	1 1,040	.....	.....	

LOCAL FUND ROADS—*continued.*

Districts.	Classification and Names of Roads.	Length in Miles. Completed. Ms.	ft.	In progress. Ms.	ft.	Total. Ms.	ft.	Average total Cost of construction per Mile. Rs.	Average annual Cost of Maintenance and Repairs in the last five years. Rs.	Remarks.
	Brought forward ...	1	1,040	.....		1	1,040	.....	.....	
		1	1,040	.....		1	1,040	.....	.....	
	II.—ROADS METALLED AND DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.									
	NORTHERN DIVISION.									
	Sálsette.									
Thána	Borivli-Gorai Road	0	3,960	4	1,320	5	0	137	688	
	Dáhánu.									
	Dáhánu Village Road repairs ...	1	683	.....		1	683	2,626	268	
	Total, Thána District ...	1	4,643	4	1,320	6	683	.....	.....	
Ahmedabad ...	Road from Dholka to Sahij ...	1	0	1	0	2	0	2,650	239	
	Total, Ahmedabad District...	1	0	1	0	2	0	.....	.....	
	TOTAL, NORTHERN DIVISION...	2	4,643	5	1,320	8	683	.....	.....	
	Total, (II)—Roads, metalled and drained throughout, but the large rivers not bridged ...	2	4,643	5	1,320	8	683	.....	.....	

	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.									
	NORTHERN DIVISION.									
Surat	Road from Lilapore to Bhadeli ...	0	1,320	.....		0	1,320	969	166	Transferred from Class I.
	Do. from Chikhli to Matwad ...	1	0	0	3,960	1	3,960	50	689	
	Do. from Chikhli to Houd ...	0	2,640	0	1,320	0	3,960	33	238	
	Do. from Párdi to Bagwáda ...	3	0	.....		3	0	46	172	
	Párdi Kasba Road	1	1,320	.....		1	1,320	161	120	
	Road from Surkhai to Kharoli ...	1	2,640	0	1,320	1	3,960	85	116	Transferred from Class V.
	Do. from Chikhli to Khergaon ...	1	0	0	3,960	1	3,960	125	226	Do. do.
	Total, Surat District ...	8	2,640	2	0	10	2,640	.....	.....	
	Bassein.									
Thána	Sopára bridge and band repairs ...	0	1,320	.....		0	1,320	98	28	
	Repairs to bridge and road between Bolinj and Koprad ...	0	1,320	.....		0	1,320	340	27	
	Do. to do. and road between Sopára and Nila-Mora	0	1,320	.....		0	1,320	324	16	
	Tarkhad road	1	0	.....		1	0	2,064	413	
	Vasli road	0	2,640	.....		0	2,640	1,000	.....	
	Total, Thána District ...	2	1,320	.....		2	1,320	.....	.....	
	TOTAL, NORTHERN DIVISION ...	10	3,960	2	0	12	3,960	.....	.....	
	SOUTHERN DIVISION.									
Belgaum	Road from Yergatti to Katkol ...	3	1,320	.....		3	1,320	.....	.....	Transferred to District Local Board during 1893-94 from Kolhápur State.
	Total, Belgaum District ...	3	1,320	.....		3	1,320	.....	.....	
	TOTAL, SOUTHERN DIVISION ...	3	1,320	.....		3	1,320	.....	.....	
	Total, (III)—Muram Roads, bridged and drained throughout	14	0	2	0	16	0	.....	.....	
	Carried over ...	18	403	7	1,320	25	1,723	.....	.....	
	Carried over Totals, I, II and III ...	18	403	7	1,320	25	1,723	.....	.....	

LOCAL FUND ROADS—*continued.*

Districts.	Classification and Names of Roads.	Length in Miles. Completed. Ms.	ft.	In progress. Ms.	ft.	Total. Ms.	ft.	Average total Cost of construction per Mile. Rs.	Average annual Cost of Maintenance and Repairs in the last five years. Rs.	Remarks.
	Brought forward ...	18	403	7	1,320	25	1,723	.....	.....	
		18	403	7	1,320	25	1,723	.....	.....	
	IV.—MURAM ROADS, DRAINED THROUGHOUT, BUT THE LARGE RIVERS NOT BRIDGED.									
	Northern Division.									
Surat	Road from Vápi to Dungra ...	2	0	.....		2	0	75	223	
	Total, Surat District ...	2	0	.....		2	0	.....	.....	
	Total, Northern Division ...	2	0	.....		2	0	.....	.....	
	Central Division.									
Ahmednagar ...	Road from Shrigonda Mámlatdár's Kacheri to Kharda Road	0	1,980	.....		0	1,980	133	57	
	Total, Ahmednagar District ...	0	1,980	.....		0	1,980	.....	.....	
Sholápur ...	Karmála-Auati Road	5	0	.....		5	0	.....	.....	Transferred from Class V.
	Total, Sholápur District ...	5	0	.....		5	0	.....	.....	
	Total, Central Division ...	5	1,980	.....		5	1,980	.....	.....	
	Total, (IV)—Muram Roads, drained throughout, but the large Rivers not bridged...	7	1,980	.....		7	1,980	.....	.....	

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V.—VILLAGE OR CLEARED ROADS.

Northern Division.

Surat	Road from Todkesar to Kim-Mándvi Main Road	0	1,200	.....	0	1,200	*295	.....	* For 1,200 feet only.
	Do. from Karanj to Kim-Mándvi Main Road	0	1,500	.....	0	1,500	†250	.....	† For 1,500 feet only.
	Do. from Olpád-Tháua to Asnabad.	0	2,640	.....	0	2,640	164	.....	
	Do. from Olpád to Orma... ...	1	0	.....	1	0	48	.....	Newly constructed.
	Do. from Dungri Railway Station to Oontoli tank	1	2,640	.....	1	2,640	1,164	133	
	Do. from Areth to Bodhán ...	3	4,620	.....	3	4,620	75	20	
	Do. from Mándvi to Vareth ...	0	400	.....	0	400	.....	94	
	Total, Surat District ...	7	2,440	.....	7	2,440	.....	.....	
Broach	Jambusar-Kahanwa Road	10	0	.....	10	0	14	140	
	Total, Broach District ...	10	0	.....	10	0	.....	.....	
	Kalyán.								
Thána ...	Road from Diva village to Railway Station	0	1,200	.....	0	1,200	7,641	.....	Newly constructed this year.
	Murbád.								
	Road near Udaldoho	2	0	.....	2	0	12	25	
	Road in Kalu near Kasgudi ...	0	1,000	.....	0	1,000	50	10	
	Máhim.								
	Road from Pálghar Dasturi to Pálghar well	0	100	.....	0	100	369	38	
	Do. to Umráli breaking bank of Devdu river	0	300	.....	0	300	80	5	
	Do. near Chahad Road at Chahade.	0	300	.....	0	300	168	10	
		2	2,900	.....	2	2,900	.....	.....	
	Carried over ...	42	4,823	7 1,320	50	863	.....	.....	
	Carried over Totals, I, II, III & IV.	25	2,383	7 1,320	32	3,703	.....	.....	

LOCAL FUND ROADS—*continued.*

Districts.	Classification and Names of Roads.	Length in Miles. Completed. Ms.	ft.	In progress. Ms.	ft.	Total. Ms.	ft.	Average total Cost of construction per Mile.	Average annual Cost of Maintenance and Repairs in the last five years.	Remarks.
								Rs.	Rs.	
		25	2,383	7	1,320	32	3,703	.....	.....	
	Brought forward ...	42	4,823	7	1,320	50	863	.....	.....	
		2	2,900	.....		2	2,900	.....	.....	
	V.—VILLAGE OR CLEARED ROADS—*continued.*									
	NORTHERN DIVISION—*continued.*									
	Váda.									
	Road between Shirsad and Tilse ...	0	150	.....		0	150	95	4	
	Do. to Gurgaon	0	180	.....		0	180	250	9	
	Do. from Pik to the river ...	0	1,000	.....		0	1,000	15	15	
	Bassein.									
	Kaman Khind Road...	0	2,640	.....		0	2,640	50	5	
	Mándvi Khind Road	2	0	.....		2	0	149	15	
	Pethar Khind Road	3	0	.....		3	0	75	25	
Thána—*contd.*	*Dáhánu.*									
	Road from Dáhánu Creek to Chinchni...	4	0	.....		4	0	15	152	
	Chinchni-Vangao Road	6	0	.....		6	0	8	.....	
	Breaking the banks in the River Dharota	0	500	.....		0	500	528	.....	
	Road from Chirakhadi to Sanján ...	3	2,640	.....		3	2,640	14	.....	
	Do. from Umbargav to Sanján ...	2	0	.....		2	0	19	.....	
	Repairs to the dip in the Koleoli Khaujan	0	500	.....		0	500	676	.....	
	Total, Thána District ...	23	5,230	.....		23	5,230	.....	.....	

	Karjat.									
Kolába ...	Road from Karjat Post Office to the Mámlatdár's Kacheri ...	0	600	.....	0	600	653	.....		
	Do. from Karjat to Dahivli ...	1	0	.....	1	0	.....	116		
	Roads in Dahivli village	0	3,500	.....	0	3,500	.....	68		
	Road in Gurav Ali in Dahivli ...	0	800	.....	0	800	.....	4		
	Roads in Neral village	0	1,600	.....	0	1,600	1,649	38		
	Roads in Khálápur village	0	2,300	.....	0	2,300	.....	74		
	Old road from Kalyán to Karjat ...	4	0	.....	4	0	.....	55		
	Road from Kolhápur to Mátherán Station Roads	0	500	.....	0	500	263	13		
	Do. from Neral School to Máthe-rán Station Road	0	250	.....	0	250	947	16		
	Total, Kolába District ...	6	4,270	.....	6	4,270	.....	.....		
	TOTAL, NORTHERN DIVISION ...	48	1,380	.....	48	1,380	.....	.....		
	SOUTHERN DIVISION.									
Bijápur ...	Agarkhed-Lachyan Road	9	0	.....	9	0	.....	.....	A portion repaired during this year. No drains.	
	Sindgi Town Road	0	4,400	.....	0	4,400	.....	.....	New road repaired this year only. No drains.	
	Mamdápur-Kodbagi Road	2	0	.....	2	0	.....	.....	Repaired only last year. No drains.	
	Bágevádi Town Road	0	3,300	.....	0	3,300	.....	.....	New road repaired only this year. No drains.	
	Town Road at Bádámi	0	2,200	.....	0	2,200	.....	412	Repaired in 1892-93 and 1893-94.	
	Hipargi-Talikat Road	30	0	.....	30	0	.....	.....	Repaired last year only. No drains.	
	Sholápur-Bellary Road (portion from Halsangi to Indi)	12	0	.....	12	0	.....	.....	Repaired by Civil Agency this year. Up to 1892-93 it was in charge of Public Works Department.	
	Sholápur-Bellary Road (portion from Tambe to Hungund)	67	0	.....	67	0	.....	.....		
	Muddebihál Town Road	0	1,320	.....	0	1,320	.....	.....	Repaired during the current year only. No drains.	
	Total, Bijápur District ...	122	660	.....	122	660	.....	.....		
Belgaum ...	Road from Bágevádi to Arlikatti ...	0	5,200	.....	0	5,200	.....	.....	A new road.	
	Total, Belgaum District ...	0	5,200	.....	0	5,200	.....	.....		
	Carried over ...	196	4,343	7 1,320	204	383	.....	.....		
	Carried over Totals, I, II, III & IV.	25	2,383	7 1,320	32	3,703	.....	.....		

LOCAL FUND ROADS—*continued.*

Districts.	Classification and Names of Roads.	Length in Miles. Completed.	In progress.	Total.	Average total Cost of construction per Mile.	Average annual Cost of Maintenance and Repairs in the last five years.	Remarks.
		Ms. ft.	Ms. ft.	Ms. ft.	Rs.	Rs.	
	Brought forward ...	25 2,383	7 1,320	32 3,703	.....	.....	
		196 4,343	7 1,320	204 383	.....	.....	
	V.—VILLAGE OR CLEARED ROADS—*continued.*						
	SOUTHERN DIVISION—*continued.*						
Dhárwár ...	The road leading to the Railway Station at Mugad	0 3,960	.....	0 3,960	496	372	New roads.
	Kambarganvi Railway Station Road.	0 1,320	.....	0 1,320	1,240	310	
	Hulkop Bandar Road	2 2,640	.....	2 2,640	1,115	277	
	Byádgi to Halihalli Road	1 2,640	.....	1 2,640	280	420	
	Hullur to Tumminkatti Road ...	6 0	.....	6 0	104	125	
	Total, Dhárwár District ...	11 0	.....	11 0	.....	.....	
Kánara... ...	Karki-Duggur Road...	1 1,200	.....	1 1,200	204	.....	
	Mirjan-Kodkani Road	1 2,640	.....	1 2,640	100	.....	A new road.
	Total, Kánara District ...	2 3,840	.....	2 3,840	.....	.....	
	Peth-Nerla Road	3 0	.....	3 0	.....	311	Outlay on repairs during current year only.
	Islámpur-Bahi Road...	5 0	.....	5 0	.....	300	Do. original cost not ascertainable.
	Track from Sátára-Kolhápur Road to Kashil	2 0	.....	2 0	123	.....	
	Road to the stream at Pádegaon ...	0 150	.....	0 150	.....	.....	
	Mahábaleshvar Road	1 0	.....	1 0	.....	64	Outlay on repairs during current year.
	Road to the Krishna River at Arle...	0 150	.....	0 150	100	.....	Improvements made in 1890-91 and 1891-92.
	Road from Kaledhan to Malharpeth-Pandharpur Road	2 0	.....	2 0	.....	95	Expenditure during current year.
	Road from Wardhungad to encamping ground	0 300	.....	0 300	50	10	

Sátára ...	Khatáv-Dáruj Road	2	2,640	1	2,640	4	0	49	.....	
	Tásgaon-Arevade Road	5	0	.....		5	0	.....	110	Expenditure during current year.
	Tásgaon-Hingangaon to River Agraini...	0	1,320	.....		0	1,320	.....	21	Do. do.
	Warna Valley Road...	34	0	.....		34	0	1,178	357	
	Khandála-Lonand Road	14	0	.....		14	0	314	.....	
	Kolghar-Vella Road	16	0	.....		16	0	930	.....	
	Vita-Saspade Road	0	1,400	.....		0	1,400	100	.....	
	Road to the river at Waduj ...	0	1,320	.....		0	1,320	.....	50	Expenditure during current year.
	Vita-Lengre Road	0	2,640	7	2,640	8	0	13	.....	Do. do.
	Kadegaon-Tudsar Road	2	2,640	1	2,640	4	0	.....	200	Do. do.
	Mahasurni-Waduj Road	3	0	10	0	13	0	20	.....	The error crept in last return as regards the length in miles has been corrected in this return.
	Waduj-Aundh Road	6	0	1	0	7	0	.....	147	
	Total, Sátára District ...	97	2,000	21	2,640	118	4,640	.....	.....	
	TOTAL, SOUTHERN DIVISION ...	234	1,140	21	2,640	255	3,780	.....	.....	
	CENTRAL DIVISION.									
Ahmednagar ...	Road from Mile No. 73 Kolhár-Bari Road near Akola to the bed of the River Pravára	0	1,705	.....		0	1,705	597	210	
	Shevgaon-Bodhegan Road to the east of Shevgaon ...	0	1,988	.....		0	1,988	696	99	
	Do. do. to the south of the town...	0	3,500	.....		0	3,500	113	75	
	Páthardi Town Road	0	450	.....		0	450	346	200	
	Manik-Doundi Ghát Road	0	2,800	.....		0	2,800	32	98	
	Street in the Deothaithan Sakat hill	0	264	.....		0	264	40	.....	No expenditure during the year.
	A new road from Párner gate to the Dispensary	.....		0	450	0	450	*95	.....	*The cost of the work.
	Carried over ...	2	147	0	450	2	597	.....	.....	
	Carried over Totals, I, II, III and IV.	307	4,903	28	3,960	336	3,583	.....	.....	
		25	2,383	7	1,320	32	3,703	.....	.....	

LOCAL FUND ROADS—*continued.*

Districts.	Classification and Names of Roads.	Length in Miles. Completed. Ms.	ft.	In progress. Ms.	ft.	Total. Ms.	ft.	Total average Cost of construction per Mile.	Average annual Cost of Maintenance and Repairs in the last five years.	Remarks.
								Rs.	Rs.	
	Brought forward...	25	2,383	7	1,320	32	3,703	.....	.....	
		307	4,903	28	3,960	336	3,583	.....	.....	
	V.—VILLAGE OR CLEARED ROADS—*continued.*	2	147	0	450	2	597	.....	.....	
	CENTRAL DIVISION—*continued.*									
Ahmednagar —*continued.*	A new road from Párner gate to the Panade	1	2,640	2	2,640	4	0	*165	.....	*Spent during the year.
	Chincholi-Wadzira Road ...	2	0	.....		2	0	.....	25	Do.
	Road from Karjat Mámlatdár's office to the school-house	0	3,200	.....		0	3,200	82	195	
	Nevása Khurd Road	0	111	.....		0	111	58	.....	
	Kharda-Jámkhed Road ...	13	0	.....		13	0	.....	175	
	Ráhuri Town Road	0	2,125	.....		0	2,125	404	106	
	Road from Karjat to Kuldháran ...	8	0	.....		8	0	.....	400	Expenditure during the year.
	Nagar-Burudgaon Road ...	1	2,640	.....		1	2,640	60	300	
	Nimba-Dehara-Wamlude Road ...	1	2,640	.....		1	2,640	65	97	
	Road from Samsherpur to Sangwi ...	5	0	.....		5	0	90	450	
	Belápur Town Road...	0	1,400	.....		0	1,400	298	79	
	Total, Ahmednagar District ...	35	4,343	2	3,090	38	2,153	.....	.....	
Khándesh ...	Erandol-Mahiji Road	0	1,000	.....		0	1,000	.....	.....	
	Erandol-Kasoda Road	0	1,800	.....		0	1,800	.....	.....	
	Total, Khándesh District ...	0	2,800	.....		0	2,800	.....	.....	
	TOTAL, CENTRAL DIVISION ...	36	1,863	2	3,090	38	4,953	.....	.....	

	INDUS LEFT BANK DIVISION.									
	Khipra Táluka.									
Eastern Nára Canals.	Shahdiplli Station to Mithrau ...	3	0	.....		3	0	272	817	New road.
	Total, Khipra Táluka ...	3	0	.....		3	0	.....	.....	
	Total, Indus Left Bank Division ...	3	0	.....		3	0	.....	.....	
	INDUS RIGHT BANK DIVISION.									
	Sehwan Táluka.									
	High road from boundary of Sehwan to boundary of Dádu	1	0	.....		1	0	44	15	
	Road from station Buback to Bilhan	4	0	.....		4	0	19	9	
	Do. Buback to Aktar	5	0	.....		5	0	.....	12	
	Do. Atkar to Bhan	6	0	.....		6	0	.....	30	
	Total, Sehwan Táluka ...	16	0	.....		16	0	.....	.....	
Western Nára...	*Johi Táluka.*									
	Road from Phulji Station to Phulji...	3	0	.....		3	0	10	30	
	Do. Digmeti to Bhawalpur ...	3	0	.....		3	0	13	38	
	Do. from boundary of Phulji to Pat Gulmahomed	10	0	.....		10	0	8	80	
	Do. Hairokhan to Pat Gulmahomed	2	0	.....		2	0	10	20	
	Do. Johi to Wáhi-Pandi... ...	15	4,400	.....		15	4,400	30	480	
	Do. from Kamalkhanjo-jole to Sukhio-Channo	2	575	.....		2	575	24	50	New road, Do.
	Total, Johi Táluka ...	35	4,975	.....		35	4,975	.....	.....	Do.
	Carried over ...	399	1,181	31	1,770	430	2,951	.....	.....	
	Carried over Totals, I, II, III and IV	25	2,383	7	1,320	32	3,703	.....	.....	

LOCAL FUND ROADS *concluded.*

District	Classification and Names of Roads	Length in Miles. Completed. Ms.	ft.	In progress. Ms.	ft.	Total. Ms.	ft.	Total average cost of metal per Mile. Rs	Average annual cost of Maintenance and Repairs for the last five years. Rs.	Remarks.
	Brought forward ...	25	2,383	7	1,320	32	3,703	.....	.....	
		405	1,151	31	1,770	436	2,951	.....	.....	
	V.—VILLAGE OR CLEARED ROADS—*concluded.*									
	INDUS RIGHT BANK DIVISION—*concld.*									
	Dádu Táluka.									
Western Nára...	Road from Dádu to Sial ...	0	2,640	.....		0	2,640	8	9	
	Do. Monder to Dádu ...	3	0	.....		3	0	.....	11	New road.
	Do. Station Phulji to Phatak Railway	1	2,640	.....		1	2,640	6	9	
	Do. Dádu to Magsi ...	2	0	.....		2	0	50	100	
	Do. Malkani to Jhalo Ferry.	1	2,640	.....		1	2,640	8	12	
	Do. Khudabad to High Road.	2	1,320	.....		2	1,320	25	56	
	Total, Dádu Táluka ...	10	3,960	.....		10	3,960	.....	.....	
	Kambar Táluka.									
Ghár Canals ...	Road from Lárkhána to Shahdádpur.	3	1,320	13	3,960	17	0	912	.....	New road. The amount in column 6 includes the average cost per mile of the construction of the road as well as bridges over it.
	Total, Kambar Táluka ...	3	1,320	13	3,960	17	0	.....	.....	
Shikárpur Canals.	Roads in the Sukkur Táluka Local Board.	1	0	.....		1	0	.....	.....	
	Do. in the Naushahro Abro Táluka Local Board.	—4	2,638	.....		—4	2,638	.....	.....	No extensions or improvements but the slight differences are due to correct re-measurements of roads.
	Do. in the Rohi do. do. ...	—2	0	.....		—2	0	.....	.....	
		+1	0	.....		+1	0	.....	.....	
	Total, Shikárpur Canals ...	—6	2,638	.....		—6	2,638	.....	.....	
	TOTAL, INDUS RIGHT BANK DIVISION...	60	2,337	13	3,960	74	1,017	.....	.....	
	Total, (V) Village or Cleared Roads...	382	1,440	37	4,410	420	570	.....	.....	
	Grand Total for Local Fund Roads...	407	3,823	45	450	452	4,273	.....	.....	
	Totals of I, II, III, IV & V Roads...	407	3,823	45	450	452	4,273	.....	.....	

ABSTRACT OF LOCAL FUND ROADS.

Classification and Names of Roads.	Length in Miles.						Remarks.
	Completed.		In progress.		Total.		
Local Fund Roads.	Ms.	ft.	Ms.	ft.	Ms.	ft.	
I.—Roads metalled, bridged and drained throughout.							
Northern Division	1	1,040	.....		1	1,040	
Southern do.	.....		.....		.....		
Central do.	.....		.....		.....		
Indus Left Bank Division	.....		.....		.....		
Indus Right do.	.....		.....		.....		
Total ...	1	1,040	.....		1	1,040	
II.—Roads metalled and drained throughout, but the large Rivers not bridged.							
Northern Division	2	4,643	5	1,320	8	683	
Southern do.	.....		.....		.....		
Central do.	.....		.....		.....		
Indus Left Bank Division	.....		.....		.....		
Indus Right do.	.....		.....		.....		
Total ...	2	4,643	5	1,320	8	683	
III.—Muram roads bridged and drained throughout.							
Northern Division	10	3,960	2	0	12	3,960	
Southern do.	3	1,320	.....		3	1,320	
Central do.	.....		.....		.....		
Indus Left Bank Division	.....		.....		.....		
Indus Right do.	.....		.....		.....		
Total ...	14	0	2	0	16	0	
IV.—Muram roads drained throughout, but the large Rivers not bridged.							
Northern Division	2	0	.....		2	0	
Southern do.	.....		.....		.....		
Central do.	5	1,980	.....		5	1,980	
Indus Left Bank Division	.....		.....		.....		
Indus Right do.	.....		.....		.....		
Total ...	7	1,980	.....		7	1,980	
V.—Village or cleared roads.							
Northern Division	48	1,380	.....		48	1,380	
Southern do.	234	1,140	21	2,640	255	3,780	
Central do.	36	1,863	2	3,090	38	4,953	
Indus Left Bank Division	3	0	....		3	0	
Indus Right do.	60	2,337	13	3,960	74	1,017	
Total ...	382	1,440	37	4,410	420	570	
Grand Total for I, II, III, IV and V ...	407	3,823	45	450	452	4,273	

Statement showing the Extension and Progress of MUNICIPAL ROADS maintained by Civil Agency in the Bombay Presidency for the year 1893-94.

Districts.	Classification and Names of Roads.	Length in Miles. Completed.	In progress.	Total.	Average total Cost of construction per Mile.	Average annual Cost of Maintenance and Repairs in the last five years.	Remarks.
	I.—ROADS METALLED, BRIDGED AND DRAINED THROUGHOUT.	Ms. ft.	Ms. ft.	Ms. ft.	Rs.	Rs.	
	NORTHERN DIVISION.						
	Ránder.						
Surat	Road from Fatuk gun to Issuf Bridge	0 580	.....	0 580	.....	.....	
	Do. from Borwad Culvert to Issuf Bridge	0 633	.....	0 633	.....	.....	
	Total, Surat District ...	0 1,213	.....	0 1,213	.....	.....	
	Bassein.						
Thána	Shri Anandi Bhavani Road ...	3 0	.....	3 0	667	436	
	Total, Thána District ...	3 0	.....	3 0	.....	.....	
	TOTAL, NORTHERN DIVISION ...	3 1,213	.....	3 1,213	.....	.....	
	Aden.						
Aden	Roads in Crater	1 5,050	.....	1 5,050	.....	.....	
	Total, Aden District ...	1 5,050	.....	1 5,050	.....	.....	

	Indus Right Bank Division.								
Shikárpur Canals.	Sukkur Municipal Road ...	0	650	.....		0	650	354	.....
	Total, Shikárpur Canals District ...	0	650	.....		0	650	.....	.....
	Total, Indus Right Bank Division...	0	650	.....		0	650	.....	.....
	Total, (I).—Roads metalled, bridged and drained throughout	5	1,633	.....		5	1,633	.....	.....
	III.—MURAM ROADS BRIDGED AND DRAINED THROUGHOUT.								
	NORTHERN DIVISION.								
	Máhim.								
Thána	Road from Kelwa to Shirgaon ...	0	1,320	0	1,320	0	2,640	160	.....
	Total, Thána District ...	0	1,320	0	1,320	0	2,640	.....	.....
	TOTAL, NORTHERN DIVISION ...	0	1,320	0	1,320	0	2,640	.....	.....
	Total, (III).—Muram Roads bridged and drained throughout	0	1,320	0	1,320	0	2,640	.....	.....
	Carried over ...	5	2,953	0	1,320	5	4,273	.....	.....
	Carried over Totals of I and III.	5	2,953	0	1,320	5	4,273	.....	.....

MUNICIPAL ROADS—*concluded.*

Districts.	Classifications and Names of Roads.	Length in Miles.						Average actual Cost of Maintenance per Mile.	Average annual Cost of Maintenance and Repairs in the last five years.	Remarks.
		Completed.		In progress.		Total.				
		Ms.	ft.	Ms.	ft.	Ms.	ft.	Rs.	Rs.	
	Brought forward ...	5	2,953	0	1,320	5	4,273	.....	.....	
		5	2,953	0	1,320	5	4,273	.....	.....	
	V.—VILLAGE OR CLEARED ROADS.									
	NORTHERN DIVISION.									
	Máhim.									
Thána	Part of the road from Kelva to Shirgam	1	2,640	.....		1	2,640	30	.....	
	Total, Thána District ...	1	2,640	.....		1	2,640	.....	.....	
	TOTAL, NORTHERN DIVISION ...	1	2,640	.....		1	2,640	.....	.....	
	INDUS RIGHT BANK DIVISION.									
	Jacobabad.									
Begári Canals...	Fish bazár road from Octroi office to Mula Karimbaksh's Musjid ...	0	660	.....		0	660	Not known .	127	300 feet of this road were raised.
	Road from ghee bazár to Shah Gazi's house	0	1,851	.....		0	1,851	Do. ...		527 feet do.
	Jayramdas Road from grain yard to ghee bazár	0	2,686	.....		0	2,686	Do. ...		Whole of this road was raised.
	Garibabad Road running by house of Khán Sáheb Rasulbaksh Mukhtiarkar	0	1,810	.....		0	1,810	Do. ...	114	250 feet of this road were raised.
	Road running by house of Dilmurad, Jamádár of Police	0	285	.....		0	285	Do. ...		285 feet do.
	Total, Begári Canals District ...	1	2,012	.....		1	2,012	.....	.....	
	TOTAL, INDUS RIGHT BANK DIVISION .	1	2,012	.....		1	2,012	.....	.....	

		INDUS LEFT BANK DIVISION.								
a 575—5	Hyderabad Canals.	Nursery road from Fort Incline to Patton's garden	0	2,230	.....		0	2,230	6,353	.....	New road constructed in 1893-94. Cost of Rs. 2,683. Other roads were only re-metalled during the year.
		Total, Hyderabad Canals ...	0	2,230	.....		0	2,230	.....	.....	
		TOTAL, INDUS LEFT BANK DIVISION.	0	2,230	.....		0	2,230	.....	.....	
		Total, (V) Village or Cleared Roads...	3	1,602	.....		3	1,602	.....	.....	
		GRAND TOTAL FOR MUNICIPAL ROADS.	8	4,555	0	1,320	9	595	.....	.....	
		Totals of I, III and V ...	8	4,555	0	1,320	9	595	.....	.....	

ABSTRACT OF MUNICIPAL ROADS.

Classification and Names of Roads.	Length in Miles.			Remarks.
	Completed.	In progress.	Total.	
Municipal Roads.	Ms. ft.	Ms. ft.	Ms. ft.	
I.—*Roads metalled, bridged and drained throughout.*				
Northern Division	3 1,213	.....	3 1,213	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Aden District	1 5,050	.....	1 5,050	
Indus Right Bank Division ...	0 650	.....	0 650	
Indus Left Bank Division ...	.....	.....	.....	
Total ...	5 1,633	.....	5 1,633	
II.—*Roads metalled and drained throughout, but the large rivers not bridged.*				
Northern Division	.....	.....	.....	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Aden District	.....	.....	.....	
Indus Right Bank Division ...	.....	.....	.....	
Indus Left Bank Division ...	.....	.....	.....	
Total ...	.....	.....	.....	
III.—*Muram roads, bridged and drained throughout.*				
Northern Division	0 1,320	0 1,320	0 2,640	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Aden District	.....	.....	.....	
Indus Right Bank Division ...	.....	.....	.....	
Indus Left Bank Division ...	.....	.....	.....	
Total ...	0 1,320	0 1,320	0 2,640	
IV.—*Muram roads drained throughout, but the large rivers not bridged.*				
Northern Division	.....	.....	.....	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Aden District	.....	.....	.....	
Indus Right Bank Division ...	.....	.....	.....	
Indus Left Bank Division ...	.....	.....	.....	
Total ...	.....	.....	.....	
V.—*Village or cleared roads.*				
Northern Division	1 2,640	.....	1 2,640	
Southern do.	.....	.....	.....	
Central do.	.....	.....	.....	
Aden District	.....	.....	.....	
Indus Right Bank Division ...	1 2,012	.....	1 2,012	
Indus Left Bank Division ...	0 2,230	.....	0 2,230	
Total ...	3 1,602	.....	3 1,602	
Grand Totals of I, III and V ...	8 4,555	0 1,320	9 595	

T. D. LITTLE,

Secretary to Government, P. W. D.

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